
USER MANUAL

Advanta™ Bed

From Hill-Rom



Product No. P1600

Hill-Rom[®]
A HILLENBRAND INDUSTRY

© 2002 by Hill-Rom Services, Inc. ALL RIGHTS RESERVED.

No part of this text shall be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information or retrieval system without written permission from Hill-Rom Services, Inc. (Hill-Rom).

Third Edition

First Printing 1999

Printed in the USA

Advanta™ is a trademark of Hill-Rom Services, Inc.

Comfortline Basic® is a registered trademark of Hill-Rom Services, Inc.

Comfortline Ultimate® is a registered trademark of Hill-Rom Services, Inc.

Hill-Rom® is a registered trademark of Hill-Rom Services, Inc.

PLEUR-EVAC® is a registered trademark of Deknatel, Inc.

SideCom® is a registered trademark of Hill-Rom Services, Inc.

ZoneAire® is a registered trademark of Hill-Rom Services, Inc.

The information contained in this manual is subject to change without notice. Hill-Rom makes no commitment to update or keep current, the information contained in this manual.

The only product warranty intended by Hill-Rom is the express, written warranty accompanying the bill of sale to the original purchaser. Hill-Rom makes no other warranty, express or implied, and in particular, makes no warranty of merchantability or fitness for a particular purpose.

Additional copies of this manual can be obtained from Hill-Rom.

To order additional copies of this manual, call (800) 445-3720 and place a parts order for part number usr017rb.

Revision Letter	Pages Affected	Date
Original Issue		December, 1999
A	All	April, 2001
B	All	September, 2002

Table of Contents

Typographical Conventions	1	Back Light	15
Introduction	2	Nurse Call (Optional)	16
Technical Specifications	3	Patient Position Monitor (PPM) (Optional)	16
Patient Characteristics	3	PPM Operation for <u>A Model</u> Beds (P1600A) . .	17
Siderail and Footboard Controls	4	Enable (Key)	17
Caregiver Controls	6	System Power	17
CPR Release	6	Modes of Operation	17
Resetting the CPR	7	PPM Operation for <u>B Model</u> Beds (P1600B) . .	21
Central Brake and Steer	7	Enable (Key)	21
Braking	8	System Power	21
Steering	8	Modes of Operation	21
Neutral	9	Sleep Surface Controls (Optional)	24
Bed Functions	9	ZoneAire® Sleep Surface	25
Bed Up/Bed Down (Hi-Lo)	9	Bed Scale (Optional)	26
Head Section	10	Before Operating The Scale	26
Knee Section	10	Turning the Scale On or Off	26
Trendelenburg/Reverse Trendelenburg . . .	11	Zeroing the Scale	26
Chair In/Chair Out	11	Changing Items on the Bed	26
Siderail Back Lighting	12	Changing the Unit of Measure	27
Night Light	12	Manual Weight Adjustment	27
Sensor Control (Night Light)	13	Indicators	27
Lockout Controls	13	Head Angle Indicator	27
Head Section Lockout	13	Trendelenburg Angle Indicator	27
Knee Section Lockout	14	Indicator Lights	28
Hi-Lo Lockout	14	Standard Features	29
All Motors Lockout	14	Headboard	29
On/Off Controls	14	Footboard	29
TV/Radio On/Off (Optional)	15	Siderails	30
Night Light	15	Foot Section	31

For Special Assistance

Hill-Rom Account Manager _____ Phone _____

Clinical Specialist _____ Phone _____

Field Service Technician _____ Phone _____

Customer Service Representative _____ Phone _____

Table of Contents

Drainage Bag Holders	32	Operating Precautions	44
Restraint Holders	32	Transport	45
IV Pole	33	Sleep Surface Mattress	45
Power Cord	33	General Cleaning/Disinfecting	46
Equipment Bracket	34	Steam Cleaning	46
Manual Operation.	34	Cleaning Hard to Clean Spots	46
Optional Features	35	Disinfecting	46
Sleep Surfaces	35	Cleaning Sleep Surfaces	47
Comfortline Ultimate® Mattress and		Cleaning Medical Fluid Spills	47
Comfortline Basic® Mattress	35	Cleaning Blood and Excreta	47
ZoneAire® Sleep Surface	35	Damage to the Sleep Surface Ticking	47
Accessory AC Receptacle Option (120 V Beds		Patient Education	48
Only)	36		
Accessories	37		
Permanent IV Poles	37		
Utility Shelf	37		
Oxygen Tank Holder	38		
Patient Controls—Standard	39		
Bed Functions	39		
Head Section	39		
Knee Section	39		
Easy-Grip Siderails	39		
Patient Controls—Optional	40		
Nurse Call	40		
Resetting the Pillow Speaker Connector	41		
Lighting	41		
Entertainment	41		
Channel Controls	42		
Volume Controls	42		
Safety	43		
Bed Positions	43		
Siderails	43		
Brakes	43		
Fluids	43		
Electricity	44		
Lockout Controls	44		
Parts and Accessories	44		

Typographical Conventions

This manual contains different typefaces and icons designed to improve readability and increase understanding of its content. Note the following examples:

- Standard text—used for regular information.
- **Boldface text**—emphasizes a word or phrase.
- **NOTE:**—sets apart special information or important instruction clarification.
- The symbol below highlights a WARNING or CAUTION:

Warning and Caution



- A WARNING identifies situations or actions that may affect patient or user safety. Disregarding a warning could result in patient or user injury.
 - A CAUTION points out special procedures or precautions that personnel must follow to avoid equipment damage.
- The symbol below highlights a CAUGHT HAZARD WARNING:

Caught Hazard Warning



- The symbol below highlights a CHEMICAL HAZARD WARNING:

Chemical Hazard Warning



- The symbol below highlights an ELECTRICAL SHOCK HAZARD WARNING:

Electrical Shock Hazard Warning



Introduction

Introduction

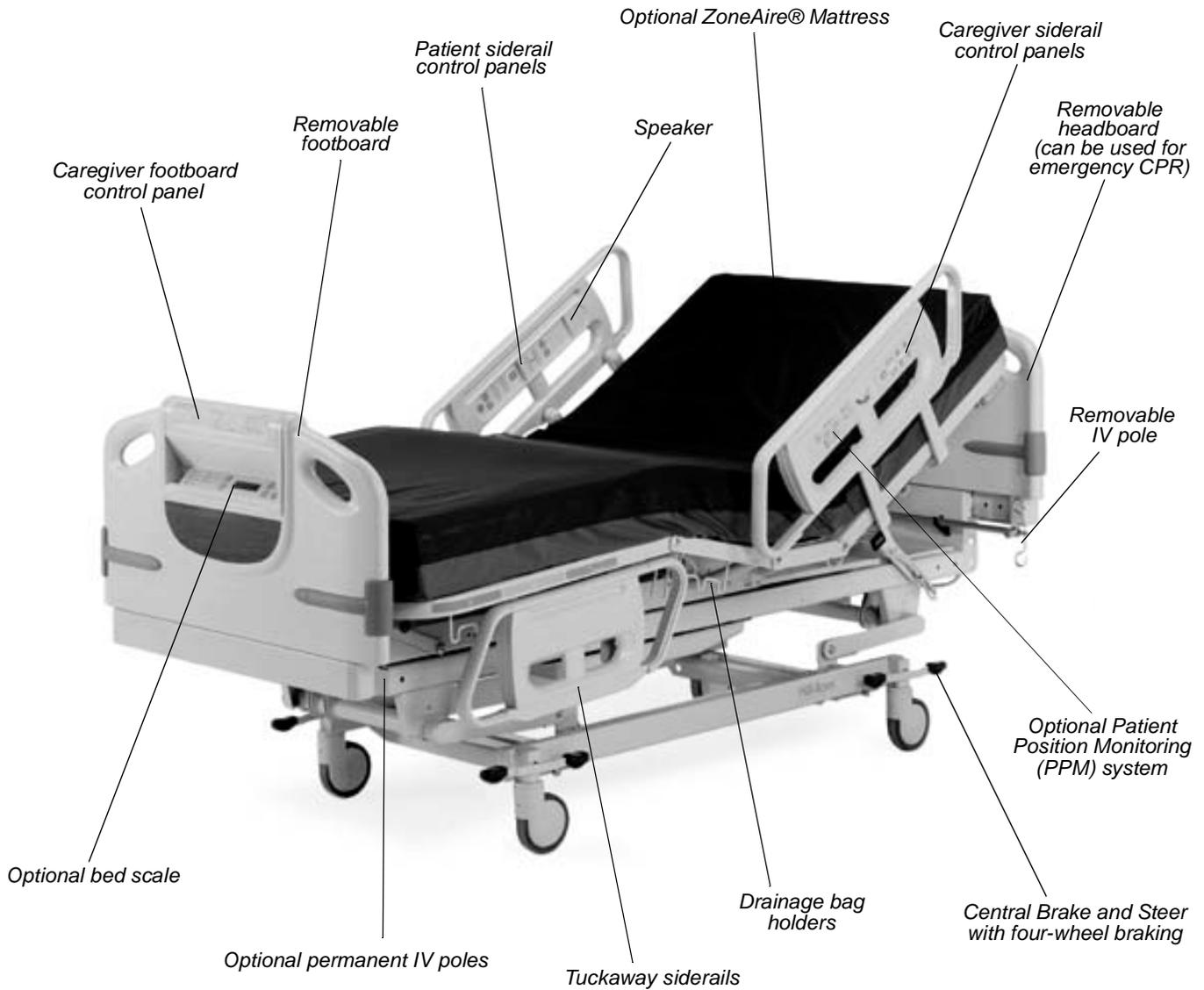


Table 1. Advanta™ Bed Model Numbers

MODEL NUMBER	DESCRIPTION
P1600A	Advanta™ Bed
P1600B	Advanta™ Bed with redesigned architecture for the new Patient Position Monitor.

Technical Specifications

Table 2. Technical Specifications

FEATURE	DIMENSION
Total length	91" (231 cm)
Retracted length	78.5" (199.4 cm)
Mattress support width	35" (89 cm)
Mattress support length	83" (211 cm)
Maximum width (siderails stored)	36" (91 cm)
Maximum width (siderails up)	42.75" (108.6 cm)
Maximum headboard height	48" (122 cm)
Maximum footboard height	45" (114 cm)
Maximum siderail height	45" (114 cm)
Power cord length (minimum)	72" (183 cm)
Minimum under-bed clearance	4.75" (12.07 cm)
Hi-Lo range	13.25" (33.66 cm)
Head section inclination (maximum)	65°
Knee section inclination (maximum)	35°
Automatic contour up (maximum)	15°
Automatic contour down	28°
Automatic contour (knee)	10°
Trendelenburg	11°
Reverse trendelenburg	11°

Patient Characteristics

- Height: 74" (188 cm) maximum, 54" (137 cm) minimum.
- Width: 36" (91 cm) maximum
- Weight: 500 lb (227 kg) maximum, 70 lb (32 kg) minimum*

*Includes mattress, IV pumps, poles, bags, etc. Accuracy of the scale may be diminished if the patient weighs more than 400 lb (181 kg). Mattress interface pressure performance may be diminished if the patient weighs more than 300 lb (136 kg).



WARNING:

Do not use the product outside the recommended patient height, width, and weight ranges. Patient injury or equipment damage may occur.

Siderail and Footboard Controls

Siderail and Footboard Controls

The head end siderails and the footboard contain most of the bed controls. The following tables list the caregiver controls for the siderails and footboard, and the patient controls for the siderails. The tables also indicate whether the item is standard or optional.

Caregiver Siderail Controls

LEFT HEAD END SIDERAIL	RIGHT HEAD END SIDERAIL
Standard	
Bed Up/Bed Down	Bed Up/Bed Down
Head Up/Head Down (without automatic contour)	Head Up/Head Down (without automatic contour)
Head Up/Head Down	Head Up/Head Down
Knee Up/Knee Down	Knee Up/Knee Down
Lockout Indicator	Lockout Indicator
Head Angle Indicator	Head Angle Indicator
Optional	
Nurse Call	Nurse Call
PPM Mode: Position, Exiting, Out of Bed	
PPM Exit Volume: Low, Med, High	
PPM Enable Control	
PPM Mode Indicators	
Brake Not Set Indicator	
Bed Not Down Indicator	

NOTE:

The caregiver siderail controls are on the outer sides of the head end siderails.

Patient Siderail Controls

LEFT HEAD END SIDERAIL	RIGHT HEAD END SIDERAIL
Standard	
Head Up/Head Down (with automatic contour)	Head Up/Head Down (with automatic contour)
Knee Up/Knee Down	Knee Up/Knee Down
Optional	
Nurse Call	Nurse Call
Nurse Call/Answer Indicators	Nurse Call/Answer Indicators
Room/Read Lights	Room/Read Lights
TV On/Off	TV On/Off
Channel Up/Down	Channel Up/Down
Radio On/Off	Radio On/Off
Select (Closed Captioned TV)	Select (Closed Captioned TV)
Volume Up/Down	Volume Up/Down
Speaker	Speaker
*PPM On/Off Indicator	

* This indicator is an unmarked light on the patient side of the left head end siderail.

NOTE:

The patient siderail controls are on the inner sides of the head end siderails.

Siderail and Footboard Controls

Caregiver Footboard Controls—Standard

ENTERTAINMENT AND LIGHTING
Siderail Back Lighting On/Off
Night Light On/Off
TV/Radio On/Off (Audio Mute)
SIDERAIL LOCKOUTS
Siderail Head
Siderail Knee
Siderail Hi-Lo
All Motors
BED POSITION CONTROLS
Bed Up/Bed Down
Trendelenburg/Reverse Trendelenburg
Chair In/Chair Out
INDICATORS
Motor Power Off
Ground Loss
Brake Not Set
Bed Not Down
Service Required
Trendelenburg/Reverse Trendelenburg Angle Indicator (mechanical gauge)

Caregiver Footboard Controls—Optional

SLEEP SURFACE SWITCHES
Auto Firm
Heel Relief 1 (ZoneAire® Sleep Surface only)
Heel Relief 2 (ZoneAire® Sleep Surface only)
Heel Relief 3 (ZoneAire® Sleep Surface only)
INDICATORS
Surface Power On/Off
Heel Relief Off
SCALE CONTROLS
Display On/Off
Lb/Kg
Zero/000.0
Change Items
Plus + (adjust weight)
Minus - (adjust weight)

Caregiver Controls

Caregiver Controls

CPR Release

The CPR Release allows the caregiver to save valuable time in an emergency situation. When activated, the CPR Release automatically lowers the head section of the bed to the flat position, enabling emergency procedures to be performed without unnecessary loss of time. After the head section is down, the knee section also comes down to the flat position. On beds equipped with an integrated air surface (ZoneAire® Sleep Surface), the *Auto Firm* function engages automatically when the CPR Release is activated. This provides a firm surface that supports a CPR board.

NOTE:

The headboard of the Advanta™ Bed can be used as a CPR board in emergencies.

Location: On both sides of the head section, near the head end of the bed.

To Activate: Press the red button on either side of the CPR Release handle, and pull the handle. Release your hand as the head section begins to come down.



WARNING:

If electrical power is lost, the head section still lowers, but the *Auto Firm* function does not engage. The optional air mattress maintains the same air pressure it had before power loss. The effectiveness of the CPR board may be reduced.

NOTE:

If electrical power is lost, the air mattress maintains the same level of pressure it had at the time of power loss.

NOTE:

If electrical power is lost, the knee section, if raised, cannot be lowered.

NOTE:

Do not use the CPR Release to lower the head section in non-emergency situations. Use the *Head Down* controls located on the siderail.

NOTE:

After activating the CPR Release, allow 30 seconds for the head motor to resume its normal operating position before using the *Head Up* or *Head Down* controls.



Emergency CPR Release Button



Emergency CPR Release Handle

Resetting the CPR

If the head section stops lifting, but the head motor runs for a brief amount of time; the CPR needs to be reset.



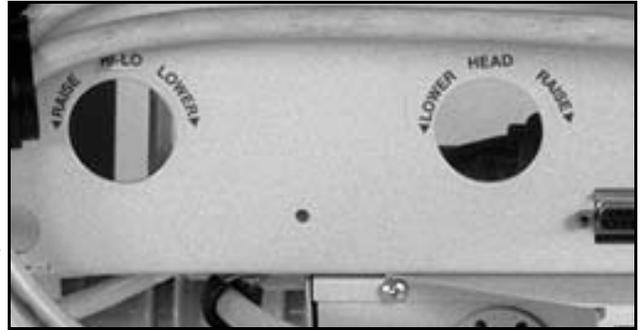
WARNING:

Unplug the bed from its power source before inserting the IV rod for manual operation. Unexpected resumption of power can cause the IV rod to rotate and cause injury.

Location: Access hole at the head end of bed.

To Reset: Insert a Hill-Rom P2217 IV rod into the access hole at the head end of bed until it engages the roll pin in the end of the screw assembly.

- Push the IV rod hard enough to push the ejection spring back from the roll pin, allowing the IV rod to engage.
- Turn the IV rod clockwise until the screw assembly reaches its mechanical stop (you should hear a click).



NOTE:

The head section will not raise during this procedure.

IV Pole Insertion Points for Manual Operation



WARNING:

Remove the IV rod before plugging the bed into an appropriate power source. Resumption of power can cause the IV rod to rotate and cause injury.

- Remove the IV rod from the head screw assembly.
- Plug the bed into its appropriate power source.
- Hold the CPR release in the activated position until the motor stops running. The bed is now operational.

Central Brake and Steer

The Advanta™ Bed is equipped with 4-wheel braking and 2-wheel steering. The pedal controls can be accessed near the casters at each of the four corners of the bed.



Steering the Advanta™ Bed

Caregiver Controls

Braking

When the brakes are engaged, all four wheels lock, and the *Brake Not Set* indicators on the bed stop flashing. When the brakes are not engaged, the casters rotate, and the *Brake Not Set* indicators flash continuously.

Location: At each caster on the bed.

To Activate: At any wheel, push down fully on the orange pedal (the one closest to the head end of the bed). When the *Brake Not Set* indicator goes out, the brakes are locked.



Central Brake and Steer—Braking



CAUTION:

Unless the bed is about to be moved, the brakes should always be set and locked.

NOTE:

After setting the brakes, try to move the bed slightly to ensure that the brakes are locked.

NOTE:

When the brakes are not locked, the *Brake Not Set* indicators flash continuously.

Steering

The 2-wheel steering system locks both foot end casters in a straight position for easier transport.

Location: At each caster on the bed.

To Activate: At any wheel, push down fully on the green pedal (the one closest to the foot end of the bed). The *Brake Not Set* indicators will start to flash.



Central Brake and Steer—Steering



CAUTION:

Unless the bed is about to be moved, the brakes should always be set and locked.

NOTE:

When the brakes are not locked, the *Brake Not Set* indicators flash continuously.

NOTE:

During patient transport and in steer mode, push the Advanta™ Bed from the head end, using the headboard handles as hand holds.

Neutral

In the neutral position, the swivels and casters move freely, allowing the bed to be moved in any direction. This function is used for exact positioning of the bed and maneuvering in confined areas

Location: At each caster on the bed.

To Activate: At any wheel, push either the orange or green pedal down slightly until the pedal is flat (in a horizontal position).



CAUTION:

Unless the bed is about to be moved, the brakes should always be set and locked.

NOTE:

When the brakes are not locked, the *Brake Not Set* indicators flash continuously.



Central Brake and Steer—Neutral

Bed Functions

The Advanta™ Bed is equipped with standard bed function controls on the caregiver side of each head end siderail, and at the footboard control panel. These controls operate all of the motor functions of the bed.

Bed Up/Bed Down (Hi-Lo)

The *Bed Up/Bed Down* controls allow you to raise or lower the bed 13.25" (33.65 cm). The low position is for general use and to assist with patient egress, while the high position is used for patient examinations.

Location: Outside left siderail, outside right siderail, footboard control panel.

To Activate: Press and hold the *Bed Up* key to raise the bed.
Press and hold the *Bed Down* key to lower the bed.



WARNING:

Leave the bed in the low position when the patient is unattended. This can reduce the possibility of patient falls and the severity of any resultant injuries.

NOTE:

The *Bed Not Down* indicator illuminates when the bed is not in the lowest position.



Caregiver Controls

Head Section

The *Head Up/Head Down* controls enable you to raise or lower the head section of the bed. The head section of the bed can be raised to any desired angle of inclination up to 65°. Using the head angle indicator (see “Head Angle Indicator” on page 27), you can raise or lower the head section to specific desired angles.

Location: Outside left siderail, outside right siderail; left patient siderail, right patient siderail.

To Activate: Press and hold the *Head Up* key to raise the head section of the bed.
Press and hold the *Head Down* key to lower the head section of the bed.



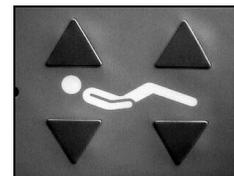
Advanta™ Bed with Head Section Raised

NOTE:

Head Angle Indicators, located on the caregiver sides of the head end siderails, display the amount of head section angle in degrees.

NOTE:

For the caregiver's convenience, the automatic contour function is only activated from the patient siderail controls.



NOTE:

When the *Head Up* control is activated from the patient siderail controls, the automatic contour function is activated. This raises the knee section automatically up to 15° when the *Head Up* function is activated. The automatic contour function helps keep the patient from sliding towards the foot end of the bed. This function is **not** activated from the caregiver controls, but is accessible to caregivers by using the patient siderail controls. Alternatively, the caregiver can simultaneously press the head up and knee up controls.



CAUTION:

Do not manually lift or lower the head section with the CPR release handle. If you do, the head section will not elevate properly until it is reset. Damage to the bed can occur when the head section is lifted with the CPR release handle.

If you manually raise or lower the head section while holding the CPR release in the activated position, the head section may not operate until you reset the CPR, refer to “Resetting the CPR” on page 7.

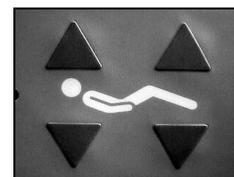
If the head section needs to be manually lifted or lowered, refer to “Manual Operation.” on page 34.

Knee Section

The *Knee Up/Knee Down* controls allow you to raise or lower the knee section of the bed to the desired angle of inclination, up to 35°.

Location: Outside left siderail, outside right siderail; left patient siderail, right patient siderail.

To Activate: Press and hold the *Knee Up* key to raise the knee section of the bed.
Press and hold the *Knee Down* key to lower the knee section of the bed.



Trendelenburg/Reverse Trendelenburg

The Advanta™ Bed can achieve up to 11° of Trendelenburg or Reverse Trendelenburg. You can activate the Trendelenburg and Reverse Trendelenburg controls at any bed height, and the bed adjusts its height as necessary.

Location: Footboard control panel.

To Activate: Press and hold the *Trend* key to place the bed into the Trendelenburg position.
Press and hold the *Reverse Trend* key to place the bed into the Reverse Trendelenburg position.



NOTE:

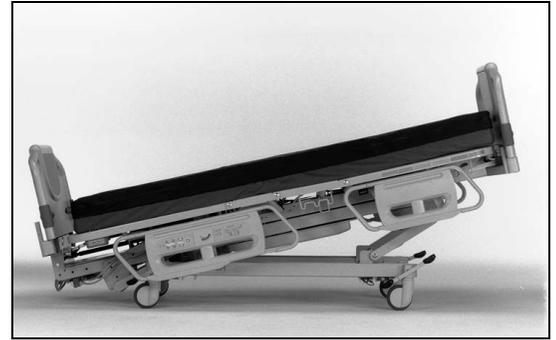
A *Trendelenburg Angle Indicator* located on the footboard control panel displays the angle of Trendelenburg or Reverse Trendelenburg in degrees and inches.

NOTE:

When the Trendelenburg or Reverse Trendelenburg functions are activated, the head and knee sections automatically return to the flat position.

NOTE:

When the Trendelenburg or Reverse Trendelenburg function is activated with the bed in the full low position, the bed automatically adjusts its height (rises slightly) enough to allow for full Trendelenburg or Reverse Trendelenburg articulation.



Trendelenburg



Reverse Trendelenburg

Chair In/Chair Out

When you activate the *Chair In* control, the bed automatically adjusts the head, knee, and hi-lo (head and foot) motors to position the bed in a “recliner chair” position.

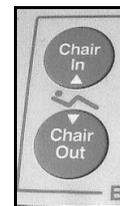
Location: Footboard control panel.



Advanta™ Bed in the Chair Position

Caregiver Controls

To Activate: Press and hold the *Chair In* key to place the bed in the chair position.
Press and hold the *Chair Out* key to place the bed in the flat position.



NOTE:

The head, knee, and hilow functions may be used to articulate the bed out of the chair position. However, once the hilow function has been activated, the *Chair Out* function may not operate as described above.



WARNING:

To prevent personal injury, do not transport patients when the Advanta™ Bed is in the chair position.



WARNING:

Check periodically to ensure that the patient remains properly positioned. The use of pillows can help maintain side-to-side positioning.



WARNING:

For large patients or patients at risk for skin breakdown, use the *Chair Out* control to tilt the chair back some after attaining the chair position. This helps to optimize the interface pressure performance.

Siderail Back Lighting

The siderail back lights illuminate the controls and make the switches more visible in dim light. The back lighting can be turned on or off at the footboard control panel.



Advanta™ Bed Siderail (Patient Side)

Location: Footboard control panel.

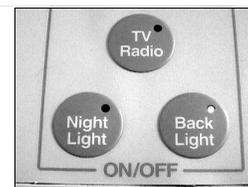
To Activate: Press and release the *Back Light* key to turn on or off the siderail backlighting.

NOTE:

The back light on the *Nurse Call* siderail control cannot be turned off.

NOTE:

When the green indicator light on the *Back Light* key is on, the function is active.



Back Light Key

Night Light

The night light is located on the bottom center of the bed frame. An adjustable light sensor can be set to turn the night light on when light in the room reaches a predetermined level of dimness.

Location: Footboard control panel.

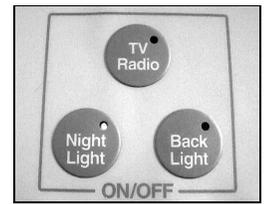
To Activate: Press and release the *Night Light* key to turn on or off the night light.



Night Light

Caregiver Controls

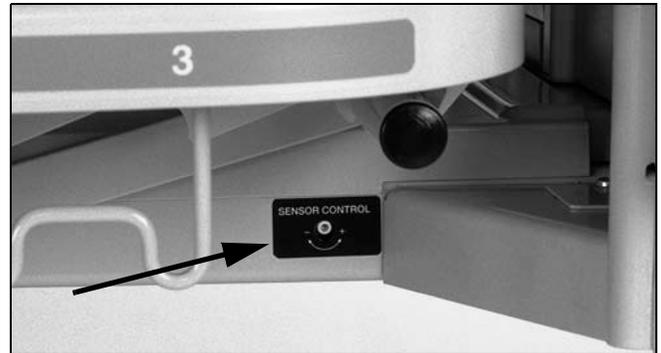
When the green indicator light on *Night Light* key is on, the function is active.



Night Light Key

Sensor Control (Night Light)

The night light *Sensor Control* is located at the foot end of the bed frame, on the right-hand side. This control allows you to set the level of light at which the night light will come on. To increase the sensitivity, that is to turn the night light on when the room is less dark, turn the control counterclockwise. To decrease the sensitivity, that is to turn the night light on when the room is darker, turn the control clockwise.



Night Light Sensor Control

Location: At the foot end of the bed frame, on the right-hand side.

To Activate: Insert a small screwdriver into the hole in the center of the *Sensor Control*. Turn the *Sensor Control* clockwise or counterclockwise, as desired.

Lockout Controls

Lockout controls lock certain articulating functions on the bed. This may be done to help ensure patient safety. When a lockout is activated, both the patient and caregiver controls for that function are disabled.

NOTE:

Activating the lockout functions does **not** affect the operation of the emergency CPR Release.

NOTE:

The *All Motors* lockout disables all bed articulation controls. No bed movement can occur, except for the emergency CPR Release.

NOTE:

When any lockout is activated, the yellow *Lockout* indicators on the caregiver siderail control panels illuminate.



Lockout Controls



Siderail Lockout Indicator

Head Section Lockout

When activated, the *Siderail Head* lockout control disables the *Head Up* and *Head Down* movement of the bed.

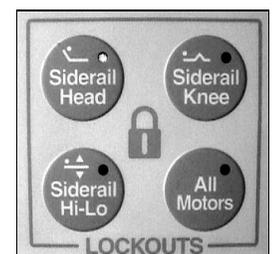
Location: Footboard control panel.

To Activate: Press and release the *Siderail Head* lockout key.

To Deactivate: Press and release the *Siderail Head* lockout key.

NOTE:

When the *Siderail Head* function is locked out, the green light on the *Siderail Head* lockout key illuminates.



Lockout Controls

Caregiver Controls

Knee Section Lockout

When activated, the *Siderail Knee* lockout control disables the *Knee Up* and *Knee Down* movement of the bed.

Location: Footboard control panel.

To Activate: Press and release the *Siderail Knee* lockout key.

To Deactivate: Press and release the *Siderail Knee* lockout key.

NOTE:

When the *Siderail Knee* function is locked out, the green light on the *Siderail Knee* lockout key illuminates.



Lockout Controls

Hi-Lo Lockout

When activated, the *Siderail Hi-Lo* lockout control disables the *Bed Up* and *Bed Down* movement of the bed.

Location: Footboard control panel.

To Activate: Press and release the *Siderail Hi-Lo* lockout key.

To Deactivate: Press and release the *Siderail Hi-Lo* lockout key.

NOTE:

When the *Siderail Hi-Lo* function is locked out, the green light on the *Siderail Hi-Lo* lockout key illuminates.



Lockout Controls

All Motors Lockout

The *All Motors* lockout control disables all three bed articulation functions. When activated, no movement of the bed is allowed, except for the emergency CPR Release.

Location: Footboard control panel.

To Activate: Press and release the *All Motors* lockout key.

To Deactivate: Press and release the *All Motors* lockout key.

NOTE:

When the *All Motors* function is locked out, the green light on the *All Motors* lockout key illuminates.

NOTE:

The red *Motor Power Off* indicator on the footboard control panel illuminates when the *All Motors* lockout is activated.

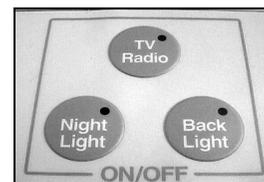


Lockout Controls

On/Off Controls

The footboard control panel has three on/off keys that control different functions on the bed. The optional TV/Radio key mutes the volume of the television and radio.

The night light (see "Night Light" on page 12) and siderail back light (see "Siderail Back Lighting" on page 12) on/off keys are standard equipment. These are used to turn on or off the night light and siderail back light. The *Nurse Call* siderail back light cannot be turned off.



On/Off Keys

TV/Radio On/Off (Optional)

The *TV/Radio* on/off key turns on and off the audio for the television and radio.

Location: Footboard control panel.

To Activate: Press and release the *TV/Radio* key. The indicator light illuminates, and the television and radio audio are activated. The television and radio volume controls on the patient siderail control panels are now operational.

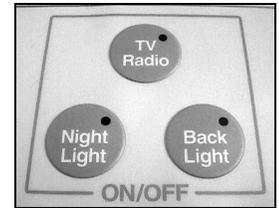
To Deactivate: Press and release the *TV/Radio* key. The indicator light goes off, and the television and radio audio are muted.

NOTE:

When the green indicator light on the key is illuminated, the function is active.

NOTE:

The Nurse Call audio can not be muted.



On/Off Keys

Night Light

The *Night Light* on/off key turns on and off the night light.

Location: Footboard control panel.

To Activate: Press and release the *Night Light* key. The indicator light comes on, and the night light is activated.

To Deactivate: Press and release the *Night Light* key. The indicator light goes off, and the night light is off.

NOTE:

When the green indicator light on the key is illuminated, the function is active.



On/Off Keys

Back Light

The *Back Light* on/off key turns on and off the siderail back lighting.

Location: Footboard control panel.

To Activate: Press and release the *Back Light* on/off key. The indicator light comes on.

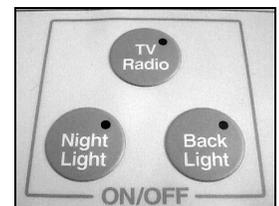
To Deactivate: Press and release the *Back Light* on/off key. The indicator light goes off, and the siderail back lighting goes off, except for the *Nurse Call* key.

NOTE:

When the green indicator light on the key is illuminated, the function is active.

NOTE:

The *Nurse Call* siderail back light is always on, and cannot be turned off.



On/Off Keys

Caregiver Controls

Nurse Call (Optional)

On Advanta™ Beds equipped with the optional *Nurse Call* feature, use the *Nurse* button to activate the *Nurse Call*.



*Nurse Call
Button*

Location: Outside left siderail, outside right siderail;
Left patient siderail, right patient siderail.

To Activate: Press and release the *Nurse* button.



CAUTION:

If power to the bed is lost, the *Nurse Call* function can still operate for at least 4 hours. Before becoming completely non-functional, the system places a non-cancelable nurse call.

NOTE:

The Nurse Call controls cannot be locked out.

Patient Position Monitor (PPM) (Optional)

Designed as the next generation of bed exit systems, the Patient Position Monitor (PPM) is the only integrated patient motion monitor with multiple modes of operation and multiple volume settings. The PPM allows caregivers to individually determine the proper level of unattended monitoring for each patient. The PPM was designed by caregivers for a balance of flexibility and ease of use.

Location: Left caregiver siderail control panel.



WARNING:

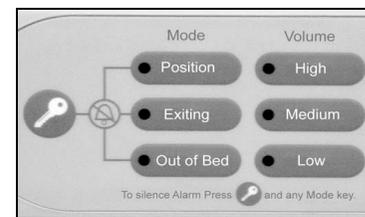
The Patient Position Monitor is not intended as a substitute for good nursing practices. It must be used in conjunction with sound patient risk assessment and protocol to prevent personal injury.

NOTE:

For the PPM System to arm, the patient's weight must be more than 70 lb (32 kg).



*Patient Position Monitor Controls
(A model bed)*



*Patient Position Monitor Controls
(B model beds)*

Bed Models

There are two different models of Advanta™ beds with PPM. **A model** beds (P1600A) and **B model** beds (P1600B). The modes of operation for the PPM are not achieved in the same way, and the siderails look differently.

For A model beds:

The caregiver changes the mode of operation by pressing and holding the *Enable* key, while pressing and releasing the *Mode* key, until the desired mode is achieved.

For B model beds:

The caregiver changes the mode of operation by first turning the PPM system off, and then arming it in the desired *Mode*.

NOTE:

The bed models are readily distinguished by the appearance of the PPM controls.

PPM Operation for A Model Beds (P1600A)

Enable (Key)

Adjustments to the *Mode* and *Volume* controls are possible only when pressing and holding the *Enable* key. This feature allows for easy access to the PPM controls, while reducing the potential for accidental or intentional use by unauthorized personnel.



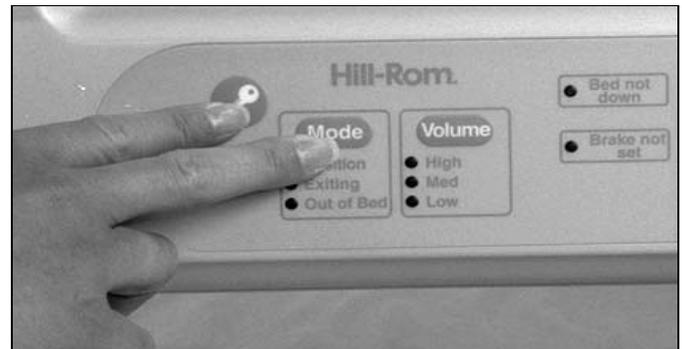
System Power

Turning on the system: For best results, the patient should be centered on the mattress.

To turn the system on, simultaneously press the *Enable* key and the *Mode* key. When first turned on, the system goes into the *Out Of Bed* mode of operation.

Turning off the system:

To turn the system off, press the *Enable* key and the *Mode* key until all the lights under the *Mode* and *Volume* keys are off.



Turning the PPM System On or Off

Modes of Operation

Changing the modes of operation: The PPM controls include the *Off* setting and three different modes of operation: *Position*, *Exiting*, and *Out of Bed*. The modes and indicator lights are listed as follows:

- *Position* (all three indicator lights on)
- *Exiting* (bottom two indicator lights on)
- *Out of Bed* (bottom indicator light on)
- *Off* (all indicator lights off)

The caregiver can change the mode of operation by pressing and holding the *Enable* key, while pressing and releasing the *Mode* key, until the desired mode is achieved. The system cycles through the modes in the following sequence: *Off*, *Out of Bed*, *Exiting*, and *Position*.

NOTE:

If the PPM system is on, unplugging the bed causes the PPM to send a nurse call until power is restored.

Caregiver Controls

Out Of Bed Mode:

The *Out of Bed* mode sets off an alarm when a patient's weight shifts significantly off the frame of the bed. This mode should be used when a caregiver wants the patient to be able to move freely within the bed, but to be alerted when the patient leaves the bed.

NOTE:

If extra equipment must be added to the bed, be sure to do so before activating the PPM system. After activation, the addition of 30 lb (14 kg) or more causes the system to beep (not alarm) until the weight is removed.

Location: Left caregiver siderail control panel.

To Activate: Perform the following steps:

- Ensure that the patient is centered on the mattress and lying still and that no visitors or caregivers are inadvertently moving the bed or affecting the bed scale (i.e., resting a hand or arm on a siderail or headboard).
- Press and hold the *Enable* key, and press and release the *Mode* key until only the indicator light next to the words *Out of Bed* illuminates.
- Release both keys. The *Out of Bed* light begins flashing
- The PPM takes approximately five seconds to activate. Once the PPM system is activated, the *Out of Bed* light stop flashing and appears steady.

To Deactivate: Perform the following:

- Press and hold the *Enable* key, and press and release a *Mode* key until all the PPM indicator lights are off. Press and hold the *Enable* key, and press and release the illuminated *Out of Bed Mode* key. The PPM indicator lights go off.

When activated in the *Out of Bed* mode and the PPM detects patient movement off the bed, an audible alarm sounds from the bed, the bottom *Out of Bed* light begins flashing, and a repeating nurse call is sent. The light and alarm continue until the system is turned off, even if the patient lies down on the bed again.

NOTE:

In order to turn off the alarms, the PPM system must be turned off at the caregiver siderail controls. The PPM system may then be turned on again (reset) by following the activation procedure.

Exiting Mode:

The *Exiting* mode sets off an alarm when a patient moves both away from the head section and towards the egress points of the bed. This mode should be used when a caregiver wants to be alerted when a potential egress is attempted.

NOTE:

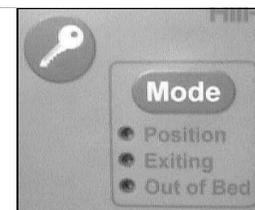
If extra equipment must be added to the bed, be sure to do so before activating the PPM system. After activation, the addition of 30 lb (14 kg) or more causes the system to beep (not alarm) until the weight is removed.

Location: Left caregiver siderail control panel.

To Activate: Perform the following steps:



Out of Bed Mode Activation



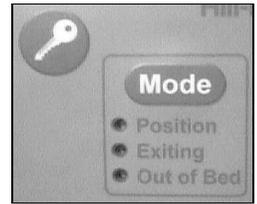
Enable and Mode Keys



Exiting Mode Activation

Caregiver Controls

- Ensure that the patient is centered on the mattress and lying still and that no visitors or caregivers are inadvertently moving the bed or affecting the bed scale (i.e., resting a hand or arm on a siderail or headboard).
- Press and hold the *Enable* key, and press and release the *Mode* key until the indicator lights next to the word *Exiting* and *Out of Bed* illuminate.
- Release both keys. The *Mode* lights begin flashing.
- The PPM takes approximately five seconds to activate. Once the PPM system is activated, the *Mode* lights stop flashing and the *Exiting* and *Out of Bed* lights appear steady.



Enable and Mode Keys

To Deactivate: Perform the following:

- Press and hold the *Enable* key, and press and release the *Mode* key until all the PPM indicator lights are off.

When activated in the *Exiting* mode and the PPM detects patient movement away from the head section and towards the edge of the bed, an audible alarm sounds from the bed, the middle *Exiting* light begins flashing, and a repeating nurse call is sent. If the patient leaves the bed, the *Out of Bed* light begins flashing. Both lights and alarms continue until the system is turned off, even if the patient lies down on the bed again.

NOTE:

In order to turn off the alarms, the PPM system must be turned off at the caregiver siderail controls. The PPM system may then be turned on again (reset) by following the activation procedure.

Position Mode:

The *Position* mode sets off an alarm when a patient moves towards either siderail or away from the head section, such as when a patient sits up. This mode should be used when a caregiver wants to be alerted as soon as the patient begins moving.

NOTE:

If extra equipment must be added to the bed, be sure to do so before activating the PPM system. After activation, the addition of 30 lb (14 kg) or more causes the system to beep (not alarm) until the weight is removed.

Location: Left caregiver siderail control panel.

To Activate: Perform the following steps:

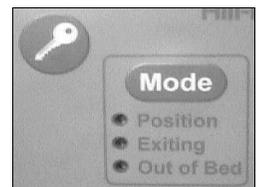
- Ensure that the patient is centered on the mattress and lying still and that no visitors or caregivers are inadvertently moving the bed or affecting the bed scale (i.e., resting a hand or arm on a siderail or headboard).
- Press and hold the *Enable* key, and press and release the *Mode* key until the lights next to the words *Position*, *Exiting*, and *Out of Bed* illuminate.
- Release both keys. The *Mode* lights begin flashing.

The PPM takes approximately five seconds to activate. Once the PPM system is activated, the *Mode* lights stop flashing and appear as steady lights.

To Deactivate: Press and hold the *Enable* key, and press and release a *Mode* key until all the PPM indicator lights are off.



Position Mode Activation



Enable and Mode Keys

Caregiver Controls

NOTE:

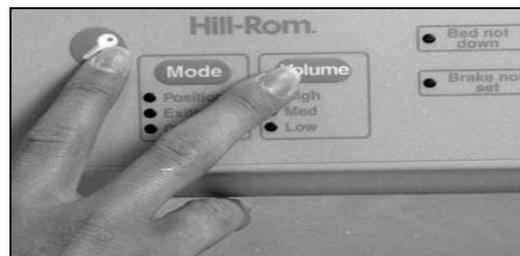
When activated in the *Position* mode and the PPM detects patient movement, an audible alarm sounds from the bed, the top *Position* light begins flashing, and a repeating nurse call is sent. If the patient leaves the bed, the *Out of Bed* light begins flashing. Both lights and alarms continue until the PPM system is turned off, even if the patient lies down on the bed again.

NOTE:

In order to turn off the alarms, the PPM system must be turned off at the caregiver siderail controls. The PPM system may then be turned on again (reset) by following the activation procedure.

Changing the Volume Level:

Ensure the PPM system is on; then press and hold the *Enable* key while pressing and releasing the *Volume* key until you reach the appropriate volume setting. When the volume is set at high, all three lights illuminate on the *Volume* indicator. When the volume is set at medium, only the *Med* and *Low* lights illuminate. When the volume is set at low, only the *Low* light illuminates. There is no “off” setting for the volume of the PPM alarm.



Changing the Alarm Volume

Changing the Alarm Tone:

The caregiver may wish to change the alarm tone in order to distinguish the PPM alarm from other pieces of equipment that have audible alarms. There are four different pre-set tones.

To change the alarm tone, press and hold the *Enable* key, while simultaneously pressing both the *Mode* and *Volume* keys. The selected alarm sounds until one of the keys is released. When you reach the desired tone, release the keys.

Canceling or Resetting the Alarm:

When an alarm is activated, the PPM requires that a caregiver physically cancel the alarm at the bedside. This is done by turning the system off (see “System Power” on page 17). If necessary, the caregiver can then place the PPM in the desired mode again. Depending on the nurse call system interface, the caregiver may also need to cancel the call at the nurse call room station or other location.

Patient Siderail Indicator:

An unlabeled indicator light is located on the left patient siderail control panel. This allows caregivers to see if the PPM is on from either side of the bed. If the light is illuminated, the system is on.

Zeroing for the Out of Bed Mode (Beds Without Scales):

The Advanta™ Bed must be zeroed for the Out of Bed mode to work properly. For beds with scales, follow the instructions for zeroing the scale (see “Zeroing the Scale” on page 26). For beds without scales, this can be done at the left caregiver siderail control panel using the following steps:

- Ensure the patient is not in the bed and that no extra equipment or weight is on the bed.
- Turn off the PPM system.
- Press and hold the *Enable* key and the *Volume* key. All the PPM indicator lights begin to flash.
- After a short period, the PPM indicator lights stop flashing. Continue to hold the *Enable* and *Volume* keys, and press and hold the *Mode* key for 5 seconds.
- Release all the keys, and the PPM indicator lights begin to flash.
- **Important:** Do not touch the bed until all the lights stop flashing (turn off) and the bed beeps once. This may take up to 20 seconds.

The bed is now zeroed, and the PPM system is ready for use.

PPM Operation for B Model Beds (P1600B)

Enable (Key)

The *Enable* switch is only used to disable the system. The PPM system can be turned off or deactivated by pressing and holding the *Enable* switch and any *Mode* switch.



Enable
Key

System Power

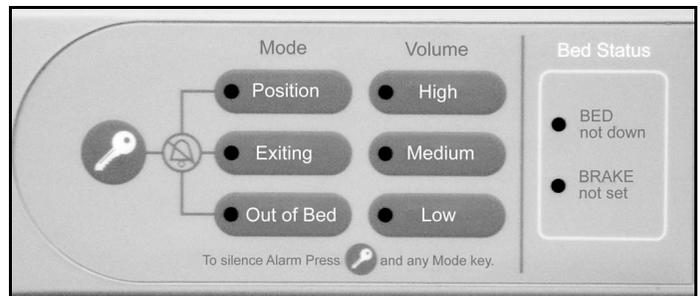
Turning on the system:

For best results, the patient should be centered on the mattress.

Turn on the system by pressing the desired *Mode* key: *Position*, *Exiting*, or *Out of Bed*.

Turning off the system:

To turn the system off, simultaneously press and hold the *Enable* switch and any *Mode* key until all of the lights under the *Mode* and *Volume* keys are off.



Turning the PPM System On or Off

Modes of Operation

Changing the modes of operation: The PPM controls include the *Off* setting and three different modes of operation: *Position*, *Exiting*, and *Out of Bed*. The modes and indicator lights are listed as follows:

- *Position* (Position indicator light on)
- *Exiting* (Exiting indicator light on)
- *Out of Bed* (Out of Bed indicator light on)
- *Off* (all indicator lights off)

The caregiver can change the mode of operation by first turning the system off, then turning it on in the desired *Mode*.

NOTE:

If the PPM system is on, unplugging the bed causes the PPM to send a nurse call until power is restored.

Caregiver Controls

Out Of Bed Mode:

The *Out of Bed* mode sets off an alarm when a patient's weight shifts significantly off the frame of the bed. This mode should be used when a caregiver wants the patient to be able to move freely within the bed, but to be alerted when the patient leaves the bed.

NOTE:

If extra equipment must be added to the bed, be sure to do so before activating the PPM system. After activation, the addition of 30 lb (14 kg) or more causes the system to beep (not alarm) until the weight is removed.

Location: Left caregiver siderail control panel.



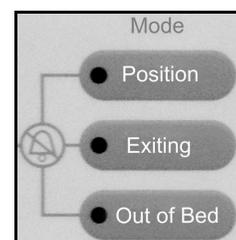
Out of Bed Mode Activation

To Activate: Perform the following steps:

- Ensure that the patient is centered on the mattress and lying still and that no visitors or caregivers are inadvertently moving the bed or affecting the bed scale (i.e., resting a hand or arm on a siderail or headboard).
- Press and hold the *Out of Bed* key until the indicator light next to the words *Out of Bed* starts to flash.
- Release the *Out of Bed* key.

To Deactivate: Perform the following:

- Press and hold the *Enable* key, and press and release the illuminated *Out of Bed Mode* key. The PPM indicator lights go off.



Mode Keys

When activated in the *Out of Bed* mode and the PPM detects patient movement off the bed, an audible alarm sounds from the bed, the bottom *Out of Bed* light begins flashing, and a repeating nurse call is sent. The light and alarm continue until the system is turned off, even if the patient lies down on the bed again.

NOTE:

In order to turn off the alarms, the PPM system must be turned off at the caregiver siderail controls. The PPM system may then be turned on again (reset) by following the activation procedure.

Exiting Mode:

The *Exiting* mode sets off an alarm when a patient moves both away from the head section and towards the egress points of the bed. This mode should be used when a caregiver wants to be alerted when a potential egress is attempted.

NOTE:

If extra equipment must be added to the bed, be sure to do so before activating the PPM system. After activation, the addition of 30 lb (14 kg) or more causes the system to beep (not alarm) until the weight is removed.

Location: Left caregiver siderail control panel.

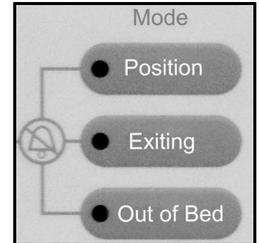


Exiting Mode Activation

Caregiver Controls

To Activate: Perform the following steps:

- Ensure that the patient is centered on the mattress and lying still and that no visitors or caregivers are inadvertently moving the bed or affecting the bed scale (i.e., resting a hand or arm on a siderail or headboard).
- Press and hold the *Exiting* key until the indicator light next to the word *Exiting* starts to flash.
- Release the *Exiting* key.



Mode Keys

To Deactivate: Perform the following:

- Press and hold the *Enable* key, and press and release the illuminated *Exiting* Mode key. The PPM indicator lights go off.

When activated in the *Exiting* mode and the PPM detects patient movement away from the head section and towards the edge of the bed, an audible alarm sounds from the bed, the middle *Exiting* light begins flashing, and a repeating nurse call is sent. If the patient leaves the bed, the *Out of Bed* light begins flashing. Both lights and alarms continue until the system is turned off, even if the patient lies down on the bed again.

In order to turn off the alarms, the PPM system must be turned off at the caregiver siderail controls. The PPM system may then be turned on again (reset) by following the activation procedure.

Position Mode:

The *Position* mode sets off an alarm when a patient moves towards either siderail or away from the head section, such as when a patient sits up. This mode should be used when a caregiver wants to be alerted as soon as the patient begins moving.

NOTE:

If extra equipment must be added to the bed, be sure to do so before activating the PPM system. After activation, the addition of 30 lb (14 kg) or more causes the system to beep (not alarm) until the weight is removed.

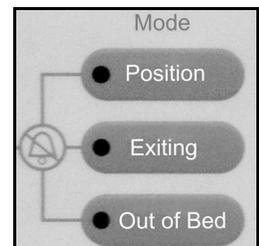


Position Mode Activation

Location: Left caregiver siderail control panel.

To Activate: Perform the following steps:

- Ensure that the patient is centered on the mattress and lying still and that no visitors or caregivers are inadvertently moving the bed or affecting the bed scale (i.e., resting a hand or arm on a siderail or headboard).
- Press and hold the *Position* key until the indicator light next to the word *Position* starts to flash, and a single beep is heard.
- Release the *Position* key.



Mode Switches

To Deactivate: Press and hold the *Enable* key, and press and release the *Position* key. The PPM indicator lights go off.

NOTE:

When activated in the *Position* mode and the PPM detects patient movement, an audible alarm sounds from the bed, the top *Position* light begins flashing, and a repeating nurse call is sent. If the patient leaves the bed, the *Out of Bed* light begins flashing. Both lights and alarms continue until the PPM system is turned off, even if the patient lies down on the bed again.

NOTE:

In order to turn off the alarms, the PPM system must be turned off at the caregiver siderail controls. The PPM system may then be turned on again (reset) by following the activation procedure.

Caregiver Controls

Changing the Volume Level

To change the volume level, make sure the PPM system is on; then press and hold the desired *Volume* switch until the LED next to the volume switch is illuminated (approximately 1 second).

Changing the Alarm Tone:

The caregiver may wish to change the alarm tone in order to distinguish the PPM alarm from other pieces of equipment that have audible alarms. There are four different pre-set tones.

Produce an alarm condition so you may hear the tone changes. Hold any two volume switches; then press and hold the third volume switch for one second and release. Continue until the desired tone is reached, then release all of the switches. Clear the alarm condition.

Canceling or Resetting the Alarm:

When an alarm is activated, the PPM requires that a caregiver physically cancel the alarm at the bedside. This is done by turning the system off (see “System Power” on page 17). If necessary, the caregiver can then place the PPM in the desired mode again. Depending on the nurse call system interface, the caregiver may also need to cancel the call at the nurse call room station or other location.

Patient Siderail Indicator:

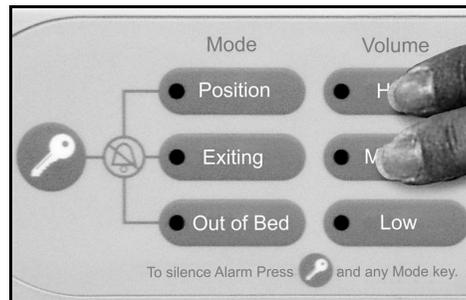
An unlabeled indicator light is located on the left patient siderail control panel. This allows caregivers to see if the PPM is on from either side of the bed. If the light is illuminated, the system is on.

Zeroing for the Out of Bed Mode (Beds Without Scales):

The Advanta™ Bed must be zeroed for the Out of Bed mode to work properly. For beds with scales, follow the instructions for zeroing the scale (see “Zeroing the Scale” on page 26). For beds without scales, this can be done at the left caregiver siderail control panel using the following steps:

- Ensure the patient is not in the bed and that no extra equipment or weight is on the bed.
- Turn off the PPM system.
- Press and hold the *Low Volume* and *Enable* keys. All the PPM indicator lights begin to flash.
- After a short period, the PPM indicator lights will stop flashing. Continue to hold the *Low Volume* and *Enable* keys, and press and hold the *Out of Bed* key for 5 seconds.
- Release all the keys, and the PPM indicator lights begin to flash.
- **Important:** Do not touch the bed until all the lights stop flashing (turn off) and the bed beeps once. This may take up to 20 seconds.

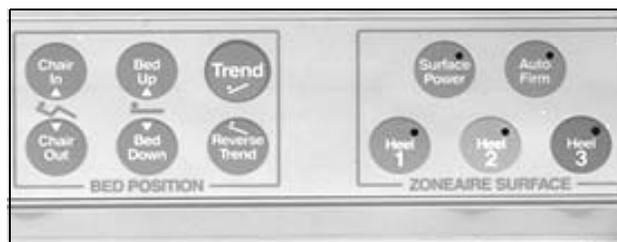
The bed is now zeroed, and the PPM system is ready for use.



Changing the Alarm Tone

Sleep Surface Controls (Optional)

The Advanta™ Bed utilizes sleep surface controls when the optional air mattress—ZoneAire® Sleep Surface—is installed on the bed. The ZoneAire® Sleep Surface has three modes of operation: *Pressure Relief*, *Heel Relief*, and *Auto Firm*.



ZoneAire® Sleep Surface Controls

ZoneAire® Sleep Surface

Pressure Relief

The *Pressure Relief* mode is for patients who are assessed to be at risk for pressure ulceration, and who require pressure relief. In the *Pressure Relief* mode, the air pressure in each zone of the mattress is automatically maintained to optimize the interface pressure. Air volumes change to control the surface around the patient's body, especially bony areas, in order to evenly distribute the pressure across the body. The surface adjusts to the patient's weight distribution, position, and bed articulation. When you activate the *Surface Power* key, the *Pressure Relief* mode starts automatically.



Location: Footboard control panel.

To Activate: Press and release the *Surface Power* key to turn the function on or off. The green indicator light on the *Surface Power* key illuminates when the system is on.

Auto Firm

The *Auto Firm* mode inflates the air mattress to maximum firmness. This helps with patient transfers, procedures, and repositioning. The *Auto Firm* mode comes on automatically when the emergency CPR Release is activated. After 30 minutes, the mattress returns to its original setting. This helps ensure that the patient does not rest on a firm surface for an extended period of time.



Location: Footboard control panel.

To Activate: Press and release the *Auto Firm* key to turn the mode on or off. The green indicator light on the *Auto Firm* key illuminates when the mode is active.

NOTE:

The *Auto Firm* mode engages automatically when the emergency CPR Release is activated.

Heel Relief

The *Heel Relief* mode is for patients who are assessed to be at risk for pressure ulceration, with particular risk to the heel area due to their level of mobility. The *Heel Relief* mode decreases the pressure under the heel area, and slightly raises the surface under the calves. There are three heel relief zones, and it is important to ensure that you select the correct one. To do this, check the heel indicator labels on either side of the bed frame at the foot section. Determine the position of the patient's heels relative to the heel relief indicator labels, and select the correct heel relief zone according to the following guidelines:



Heel Relief Labels

- Heel position 1. If the patient's heels are positioned within the blue label area marked "1," select *Heel Relief* mode 1.
- Heel position 2. If the patient's heels are positioned within the green label area marked "2," select *Heel Relief* mode 2.
- Heel position 3. If the patient's heels are positioned within the orange label area marked "3," select *Heel Relief* mode 3.



NOTE:

After selecting and pressing a heel relief key, check the patient to ensure that the correct heel relief mode has been chosen.

Location: Footboard control panel.

To Activate: Press and release the *Heel 1*, *Heel 2*, or *Heel 3* key to turn the function on or off. The green indicator light on each key illuminates when that function is on.

Caregiver Controls

Bed Scale (Optional)

The Advanta™ Bed scale has an accuracy of 1%, and an operating range of 0 to 450 lb (0 to 204 kg). The scale display and six scale keys are located on the footboard control panel. For best results using the scale, follow the instructions carefully.



Advanta™ Bed Scale Controls

Before Operating The Scale

The scale is very sensitive. The weight reading will be most accurate if the bed is not touching anything. This includes the headwall, lines such as pendant controls, ventilators, or drainage bags. Anything that affects the weight on the bed even slightly will cause an incorrect weight to appear on the display.

It is also important that no one touch the bed while the scale is operating. For example, touching the footboard can add several pounds to the displayed weight.

Before placing the patient on the bed, prepare the sleep surface to accurately weigh the patient. Place all linens, blankets, pillows, or other items the patient will be using on the bed. A list of these items posted near the bed could be helpful for future reference.

Turning the Scale On or Off

If the scale display reads “OFF,” press the *On/Off* key to turn on the scale power.



NOTE:

The scale automatically turns off after 5 minutes.

NOTE:

Be sure to place any items on the bed that the patient will be using (linens, pillows, blankets, etc.).

Zeroing the Scale

The bed scale must be set at zero before weighing a patient.



- Set the scale at zero by pressing and holding the *Zero/000.0* key on the scale control panel.
- Continue holding the *Zero/000.0* key until the scale display “000.0” stops flashing; then release the key.
- **Important!** After you release the *Zero/000.0* key, the scale display “CALC” will appear. **Do not touch the bed** until the display stops flashing “CALC” and a beep sounds. This may take up to 20 seconds.
- Place the patient on the bed. For the most accurate reading, the patient must be lying still and centered on the mattress.

Changing Items on the Bed

The Advanta™ Bed scale can compensate for items that are added to or removed from the bed. Use the scale control panel to change (add or remove) items on the bed.



- Press and hold the *Change Items* key on the scale control panel until the displayed weight stops flashing; then release the key. The scale holds the patient’s weight in the memory while items are being changed.
- Change the items on the bed.

NOTE:

If there is a list of bed items, you may want to update the list at this time.

- After you have changed all the desired items on the bed, press and release the *Change Items* key. The scale will resume displaying the patient's weight.

Changing the Unit of Measure

The scale can display the patient's weight in either pounds or kilograms.

Press and release the *LBS/KGS* key on the scale control panel. The displayed weight changes from one unit of measurement to the other.



Manual Weight Adjustment

You can adjust the displayed weight of the scale manually by using the *Plus +* and *Minus -* keys on the scale control panel.

- To adjust the weight up, press and hold the *Plus +* key on the scale control panel. Release the key when the desired weight is displayed.
- To adjust the weight down, press and hold the *Minus -* key on the scale control panel. Release the key when the desired weight is displayed.

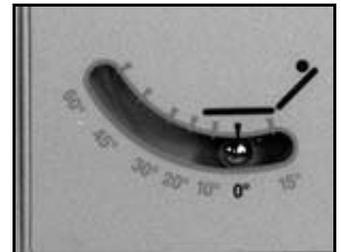


Indicators

The Advanta™ Bed is equipped with a variety of safety and information indicators. Using these indicators can enhance patient safety and comfort.

Head Angle Indicator

The head angle indicator shows the angle of head elevation from -15° to 60° from the horizontal. Head angle indicators are located on the caregiver sides of the head end siderails. To adjust the head section of the Advanta™ Bed to a specific angle, observe the head angle indicator while adjusting the *Head Up/Head Down* controls. Raise or lower the head section until the indicator ball rests at the appropriate position.



Head Angle Indicator

Trendelenburg Angle Indicator

The Trendelenburg (and Reverse Trendelenburg) angle indicator is located on the footboard control panel, and shows the angle of Trendelenburg (or Reverse Trendelenburg) in degrees and inches.



*Trendelenburg
Angle Indicator*

Caregiver Controls

Indicator Lights

Indicator lights are used to inform caregivers of important information concerning the Advanta™ Bed. Most of the indicator lights are located on the footboard control panel.

Motor Power Off: The *Motor Power Off* indicator light illuminates when the *All Motors* lockout is activated.

Ground Loss: The *Ground Loss* indicator light flashes when the electrical path to ground has unusually high resistance, is open, or if phase and neutral are reversed.

Brake Not Set: The *Brake Not Set* indicator light flashes when the brakes are not fully engaged. Unless the bed is being moved intentionally, the brakes should always be applied to minimize potential safety hazards. This indicator light is also located on the left, caregiver, head-end siderail (beds with PPM option only).

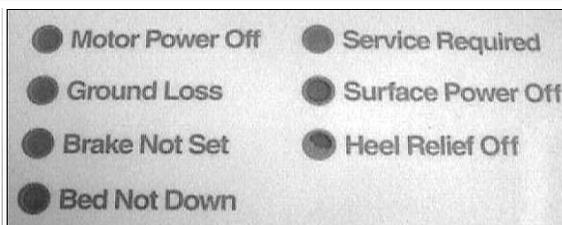
Bed Not Down: When the *Bed Not Down* indicator light is illuminated, it means the bed is not at its lowest position. For enhanced patient safety, it is recommended that the bed be in the lowest position unless a caregiver is present. An indicator light is also located on the left, caregiver, head-end siderail (beds with PPM option only).

Service Required: The *Service Required* indicator light flashes when the system detects a malfunction. Refer the matter to qualified maintenance personnel using the Advanta™ Bed Service Manual.

Surface Power Off: (ZoneAire® Sleep Surface only) The *Surface Power Off* indicator light flashes when the air system power is disconnected or turned off.

Heel Relief Off: (ZoneAire® Sleep Surface only) The *Heel Relief Off* indicator light comes on when the *Heel Relief* mode on the ZoneAire® Sleep Surface is inactive.

Siderail Lockout Indicators: The siderail bed functions can be locked out to prohibit unauthorized use. This is done by selecting the appropriate lockout control on the footboard. When a lockout is engaged, the *Lockout* indicator on the siderail illuminate. If a bed function appears inoperative, check to see whether the *Lockout* indicators are illuminated before calling for assistance.



Indicator Lights

Standard Features

Headboard

The headboard is connected to the bed frame at the head end of the bed. The headboard can be removed to gain increased access to the patient's upper body area, and can be used as an emergency backboard during CPR procedures.

Removal: Grasp the hand holds firmly and lift up.

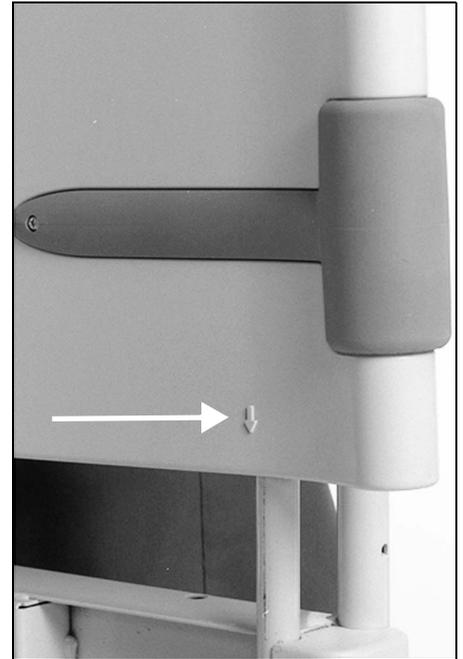
Installation: Using the guide arrows, align the headboard sockets with the posts on the bed frame, and lower the headboard onto the bed frame.

NOTE:

If necessary, gently push the headboard down until it rests on the bed frame.



Headboard Removal



Headboard Installation

Footboard

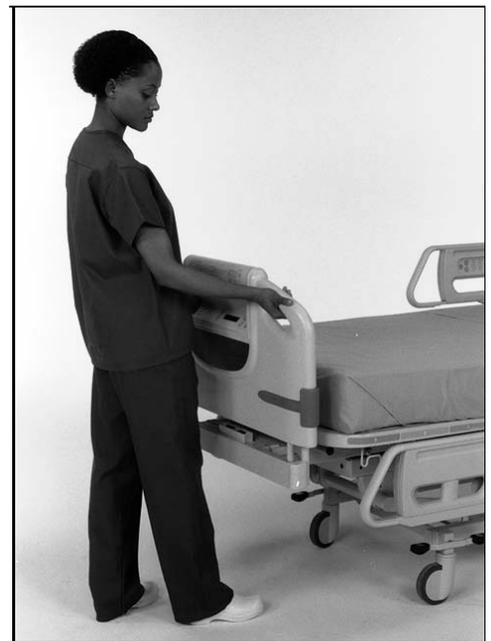
The footboard is attached to the bed frame at the foot end of the bed. It houses several of the bed controls in the footboard control panel. The footboard can be removed for cleaning and maintenance.

Removal: To remove the footboard, remove the safety pins (if installed) and grasp the footboard by its handles and lift upwards.

Installation: To install the footboard, align the guide arrows on the footboard with the footboard posts, and lower the footboard onto the posts and install the safety pins (if installed).

NOTE:

The footboard control panel connectors (located on the bottom center of the footboard) will align and connect correctly when the footboard is installed correctly on the posts.



Footboard Removal And Installation

Standard Features

NOTE:

Between the connector pin sockets on the footboard is a “key.” The footboards can be exchanged between the Advanta™ Beds as long as both exchanging beds either have air mattresses, or both do not.



CAUTION:

If the footboard does not sit completely down on the Advanta™ Bed, do not force it down. Footboard or connector damage could result.

Siderails

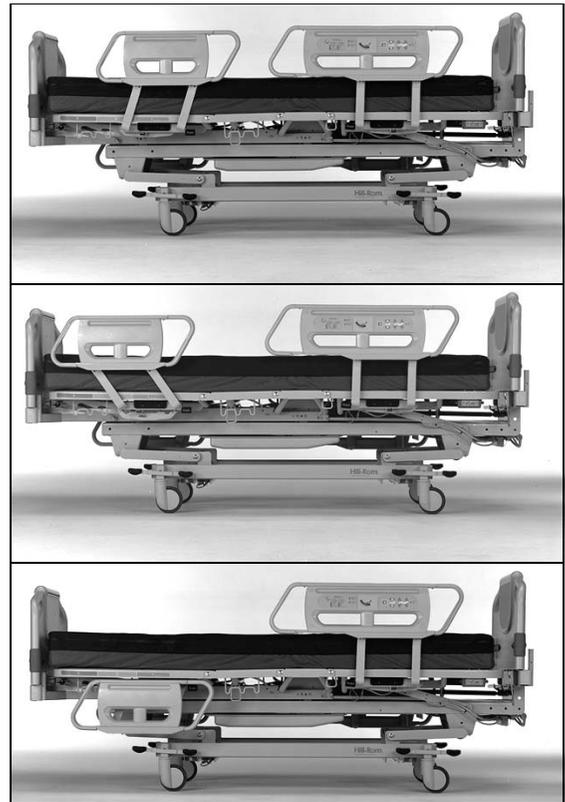
The Advanta™ Bed has two head end siderails and two foot end siderails. The head end siderails contain caregiver and patient siderail controls, and can be adjusted between the upright and lowered positions.

The foot end siderails do not contain any controls. They can be adjusted to three positions; upright, intermediate, and lowered.

Upright: The fully upright level is used for easy and safe transport of patients. The upright level also discourages unauthorized egress by patients.

Intermediate: The foot end siderails can be lowered to a middle position. Patients can use the foot end siderails in this position as a hand hold to assist them when exiting the bed.

Lowered and Stowed: The lowered and stowed position places the siderails beneath the mattress deck. With the siderails in this position, the bed can fit through smaller door openings and passageways. This position also helps eliminate a potential gap between beds during patient transfers.



Foot End Siderail Articulation

To Adjust: To raise or lower the siderails, press the *Push* button next to the siderail, and swing the siderail into the desired position. When raising the siderails, you will hear a “click” when the siderail is securely in place. To store a siderail, lower it completely and push it in under the bed surface.



Siderail Release

NOTE:

Ensure the brakes are set when transferring a patient to or from the Advanta™ Bed.

**WARNING:**

Siderails are not intended to be used as restraint devices. The appropriate medical personnel should determine the level of restraint necessary to ensure that a patient will remain safely in the bed system.

**WARNING:**

Although the siderails have been designed to reduce the risk of patient entanglement, the potential exists, particularly with patients who are agitated or disoriented as well as patients who lack the physical strength to extract themselves if they become entangled. Caregivers should carefully evaluate the need for siderails and periodically check patients in accordance with facility protocols for safe positioning.

**CAUTION:**

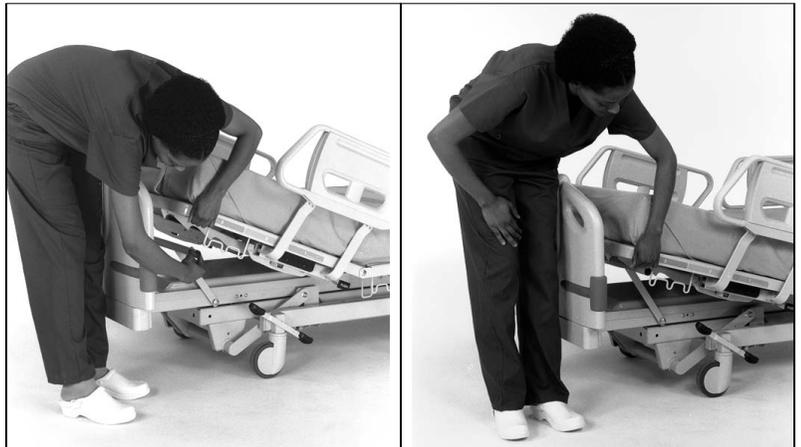
After changing the position of the siderails, tug on them slightly to ensure that they are securely locked in place.

Foot Section

The foot section of the Advanta™ Bed can be raised manually using the vascular positioning bar.

To Raise: Lift the foot section of the bed by the bed frame with one hand. Lift the vascular positioning bar with the other hand, and position it at the desired level. Lower the bed frame onto the vascular positioning bar.

To Lower: Lift the foot section of the bed by the bed frame with one hand. Lower the vascular positioning bar with the other hand, and lower the bed frame to the horizontal level.



Foot Section Articulation

**CAUTION:**

Use caution to avoid back injury or pinched body parts when raising or lowering the foot section.

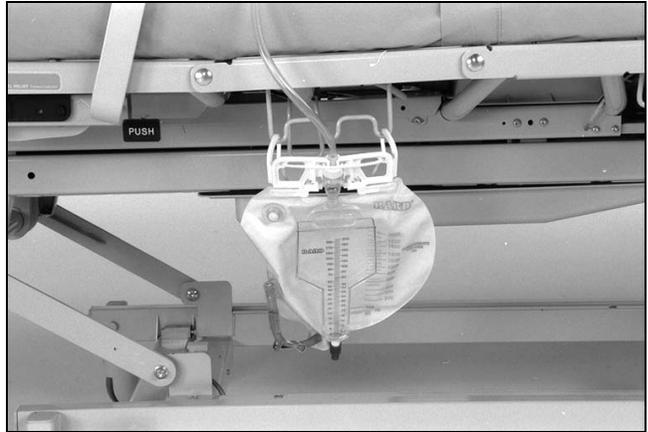
Standard Features

Drainage Bag Holders

The Advanta™ Bed has 4 drainage bag holders—two centrally located at the sides of the bed, and two at the foot end. The holders are recessed under the bed frame to allow for normal siderail operation. The drainage bag holders can accommodate any combination of the following drainage devices:

- Fecal incontinence bag
- 250/2000 ml Foley collection bag
- PLEUR-EVAC®¹ on the foot end hooks (during transport only)

When the bed is docked, place the PLEUR-EVAC® device or other chest drainage devices on the floor and far enough from the bed so as not to interfere with bed articulation.



Drainage Bag Holders



CAUTION:

Do not tie restraints to the drainage bag holders.

Restraint Holders

The Advanta™ Bed facilitates vest, wrist, waist, and ankle restraints.



CAUTION:

Patient restraints are not intended as a substitute for good nursing practices.



CAUTION:

Restraints **must** be attached to the proper attachment points on the articulating sections of the bed. Failure to do so could result in patient injury.

1. PLEUR-EVAC® is a registered trademark of Deknatel, Inc.

IV Pole

The Advanta™ Bed comes equipped with one IV pole, stored at the head end of the bed beneath the articulating frame, and four standard IV pole sockets. The IV pole sockets are located at each corner of the bed at the head and foot sections.

NOTE:

When not in use, the IV pole should be secured in the storage area.

Location: At the head end of the bed, under the articulating frame section.

To Deploy: Using the *Head Up* control, raise the head end of the bed, and remove the IV pole from the holders. Insert the pole into the desired socket, and turn clockwise until it drops fully into the socket and locks into place.

To Store: Turn the IV pole counterclockwise, and lift it from the socket. Store it at the head end of the bed.



IV Pole



CAUTION:

Do not exceed the 25 lb (11 kg) weight capacity of the IV pole.



CAUTION:

When lowering the upper section of an IV pole, always grasp and hold the upper section of the pole before pulling the release knob.

NOTE:

Added height is recommended for gravity drain applications.

Power Cord

The power cord is located at the head end of the bed. When not in use, it can be stored by wrapping it around the power cord holders.



Power Cord Storage

Standard Features

Equipment Bracket

Slide the equipment bracket over the top of the footboard and use it to hold charts, air mattress products, or other equipment that require a convenient location at the foot end of the bed.



CAUTION:

Do not exceed the 40 lb (18 kg) weight capacity of the equipment bracket.

Equipment Bracket Mounting

Manual Operation.

The *Head* and *Hi-Lo* functions of the bed may be manually operated in the event of power loss by using the IV pole as a crank for the motors

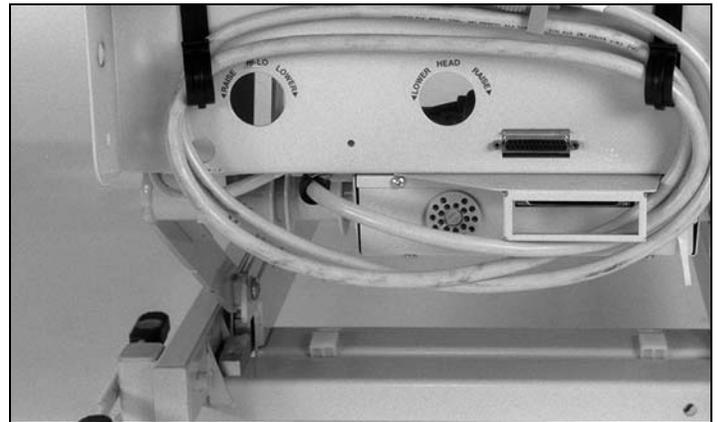


WARNING:

Unplug the bed from its power source before using the IV pole to manually adjust the bed. A sudden resumption of power could result in personal injury or equipment damage.

To Activate: Unplug the bed from its power source.

Insert the lower end of the IV pole into the hole at the head end of the bed for the desired motor function (Head, Hi-Lo head or Hi-Lo foot), and manually crank the motor drive.



WARNING:

Remove the IV pole immediately after completing any manual adjustments. Failure to do so could result in personal injury or equipment damage.

Optional Features

Sleep Surfaces

The Advanta™ Bed can be equipped with three different mattresses. Each mattress is designed for the needs of the patient, and the selection of which mattress to use depends upon the patient's risk for pressure ulceration. Risk categories and recommended mattresses include:

- Low risk patients—Comfortline Ultimate® Mattress or Comfortline Basic® Mattress
- Moderate-to-high risk patients—ZoneAire® Sleep Surface

The assessment of the patient's risk for pressure ulceration is made by qualified caregivers.



CAUTION:

A sound risk assessment and protocol is necessary to determine the appropriate surface for the patient's condition.

Comfortline Ultimate® Mattress and Comfortline Basic® Mattress

The Comfortline Ultimate® and Comfortline Basic® mattresses are all-foam, layered mattresses with high resiliency foam and foam side bolsters. The Comfortline Ultimate® mattress is also modular. These mattresses provides basic pressure reduction, and are recommended for patients in the low risk category for pressure ulceration.

ZoneAire® Sleep Surface

The ZoneAire® Sleep Surface is a six-zoned, air and foam mattress that provides significant improvement in the reduction of pressure ulceration for moderate-to-high risk patients. The six zones are the head, seat, thigh, and three heel zones. The ZoneAire® Sleep Surface has three modes of operation—*Pressure Relief* (normal), *Heel Relief*, and *Auto Firm*. For information on the operation and controls, see “ZoneAire® Sleep Surface” on page 25.

NOTE:

The mode of operation for the ZoneAire® Sleep Surface should be selected using good patient assessment and protocol practices.

Pressure Relief Mode: This is the normal and default mode for the ZoneAire® Sleep Surface. This mode is for patients who are assessed to be at risk for pressure ulceration, and who require pressure relief. In this mode, the pressure within each zone of the surface is automatically maintained to optimize interface pressure. Air volumes are changed to more evenly distribute pressure around the patient's body, especially the bony prominences. The surface adjusts to the patient's weight distribution and position, along with the bed articulation.

Heel Relief Mode: The *Heel Relief* mode is for patients who are assessed to be at risk for pressure ulceration, require pressure relief, and whose level of mobility is such that the patient's heels are at particular risk of ulceration. The ZoneAire® Sleep Surface has three heel relief modes.

NOTE:

The ZoneAire® Sleep Surface must first be in the *Pressure Relief* mode before the *Heel Relief* mode can be activated.

Auto Firm: This mode inflates the mattress and maximizes the firmness of the surface to assist in patient transfers or repositioning. This mode is also engaged when the emergency CPR Release feature on the bed is activated.

Optional Features

NOTE:

Refer to the mattress control panel to determine the active surface mode. An illuminated indicator shows the active mode.



CAUTION:

A sound risk assessment and protocol is necessary to determine the appropriate surface for the patient's condition.



CAUTION:

The sleep surface impermeability and pressure relieving capabilities could be affected by needle sticks or other bladder punctures. Caregivers should be instructed to avoid bladder punctures caused by needle sticks or improper use of x-ray cassette holders. The sleep surface should be regularly inspected for such damage.

NOTE:

Patients with body weight or length near the recommended limits should be monitored more frequently for desired results (see "Technical Specifications" on page 3).

Accessory AC Receptacle Option (120 V Beds Only)

The optional, accessory receptacle, located at the foot of the bed, is a convenient source of AC power for accessory devices. It should not be used for life support equipment, since it introduces additional over-current limitations, and grounding connections into the supply line.

Beds that incorporate the accessory receptacle option are equipped with two power cords. Electrical isolation is provided between accessory receptacle and bed supplies and grounds, so that leakage current from faulty equipment, plugged into the receptacle, will not, under fault conditions (loss-of-ground in the receptacle or wall supply), become part of the risk current for the bed.



WARNING:

Risk of power outage. Do not use accessory outlet for life support equipment. Plug life support equipment directly into hospital supply. Do not plug bed and auxiliary receptacle into wall receptacles on the same circuit.

The Advanta™ Bed accessory receptacle is overload protected by an 8A circuit breaker. Since the bed is rated 12A under fully loaded, worst case operating conditions, and the receptacle is rated 8A, the combination could exceed the capacity of a single supply circuit. Therefore, the bed and receptacle should always be plugged into separate supply circuits.

Grounding continuity should be checked periodically. Receptacle is rated 120V, 60Hz, 8 Amps, single phase.



SHOCK HAZARD:

Electrical shock hazard. Refer servicing to qualified personnel. This bed is provided with two power cords. Unplug both cords before opening service compartment, J-box, or receptacle.

Accessories

Permanent IV Poles

The Permanent IV Poles option consists of two IV poles that support up to two IV pumps plus bags. The IV poles are attached to the bed frame near the corners of the headboard. Each IV pole can support up to 40 lb (18 kg).

To Deploy:

- Lift the IV pole from its stored position behind the headboard and position it straight up.
- Make sure that the pole drops and locks into position.
- Raise the upper section of the pole to the desired height. The IV pole is ready for use.

To Store:

- Grasp and hold the upper section of the IV pole. Push the upper collar down, and lower the upper pole section into the lower pole section.
- Lift the lower section of the IV pole up, and lower the pole down to the stored position behind the headboard. The poles should rest in the storage slots provided on the bed frame.



CAUTION:

Do not exceed the 40 lb (18 kg) IV pole weight capacity.



CAUTION:

Do not mount infusion pumps on the lower section of an IV pole. Interference with head section articulation could result.

Utility Shelf

The utility shelf accessory can be installed at the foot end of the bed. The utility shelf measures 15" by 33" (38 cm x 84 cm), and can hold up to 45 lb (20 kg) of equipment.

Installation: Insert the ends of the utility shelf supports into the IV pole support holes at the foot end of the bed. Push down firmly to ensure the utility shelf is fully seated.

Removal: Remove any equipment from the utility shelf. Grasp the sides firmly and lift the utility shelf and supports out of the IV pole support holes.



CAUTION:

Do not exceed the 45 lb (20 kg) utility shelf weight capacity.



Utility Shelf

Accessories

Oxygen Tank Holder

The oxygen tank holder attaches to the head end of the articulating frame in a vertical position. The Oxygen Tank Holder accommodates one "E" size oxygen tank with a regulator. The mounting points are located to enable the oxygen tank holder to pivot.

Installation: Install the mounting bar vertically into a mounting socket at the head end of the bed frame. Place the tank in the holder, and tighten the holder thumbscrew. The thumbscrew prevents the oxygen tank from rotating in the holder.

Removal: Loosen the thumbscrew that secures the tank in the holder, and lift the tank out of the holder. Lift up on the oxygen tank holder, and remove it from the mounting sockets.



Oxygen Tank Holder

Patient Controls—Standard

Bed Functions

The Advanta™ Bed is equipped with both head and knee function controls on the patient side of each head end siderail.

NOTE:

To prevent a patient from using the bed functions, activate the appropriate lockout on the footboard control panel.

Head Section

The patient can use the *Head Up/Head Down* controls to raise or lower the head section of the bed to the desired position. Unlike the caregiver head section controls, the patient head section controls incorporate the automatic contour feature. The automatic contour feature raises the knee section automatically when the *Head Up* function is activated. This helps keep the patient from sliding towards the foot end of the bed.

Knee Section

The patient can use the *Knee Up/Knee Down* controls to raise or lower the knee section of the bed to the desired position. The patient can also use the *Knee Down* control to disable the automatic contour function when the *Head Up* function is activated.

Easy-Grip Siderails

Each siderail is equipped with built-in ridges near the top edge of the siderail. It is designed to help the patient during repositioning or egress by providing a more secure grip on the siderails.



Easy Grip Siderail

Patient Controls—Optional

Patient Controls—Optional



Advanta™ Bed Siderail (Patient Side)

Nurse Call

On Advanta™ Beds equipped with the optional nurse call feature, use the *Nurse* button to place a call to the nurse call system. Above the *Nurse* button, the *Call* indicator light illuminates on the patient's siderail controls, indicating a call has been made. Below the *Nurse* button, the *Answer* light illuminates on the patient's siderail controls when the call is acknowledged. The *Call* and *Answer* lights are only on the patient's side of the head end siderails.

Location: Left siderail, right siderail;
Left patient siderail, right patient siderail.

To Activate: Press and release the *Nurse* button.

- The yellow *Call* light flashes, and an audible beep sounds.
- When the *Answer* light comes on, speak into the speaker/microphone located on the patient's side of the head end siderails.



CAUTION:

If power to the bed is lost, the Nurse Call function can still operate for at least 4 hours. Before becoming completely non-functional, the system will place a non-cancellable Nurse Call.

NOTE:

The nurse call controls cannot be locked out.



Nurse Button

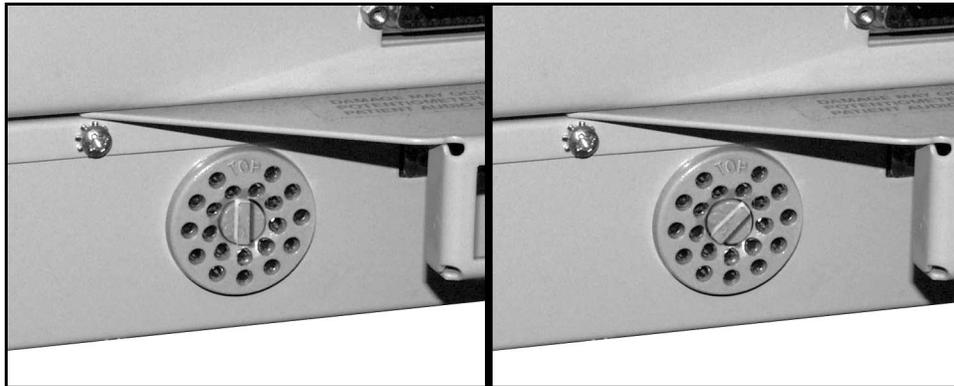
Resetting the Pillow Speaker Connector

If a pillow speaker is being used and it becomes disconnected, a Nurse Call will be placed.

To cancel the Nurse Call, reset the pillow speaker connector.

Location: Head end, left of the SideCom® communication connector.

To Reset: Press the switch in and turn it clockwise one-eighth of a turn.



Before Reset

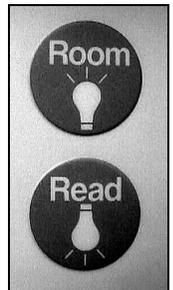
After Reset

Lighting

The optional *Room* and *Reading* light controls can be used to turn on and off the lights in the patient's room.

Location: Left patient siderail, right patient siderail.

To Activate: Press and release the *Room* or *Read* key, as desired. The room light or reading light illuminates.



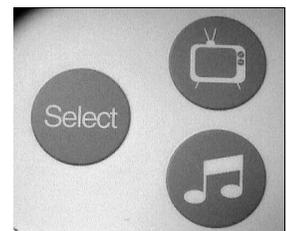
Lighting Controls

Entertainment

The optional entertainment controls can be used to turn on or off the radio and TV. The *Select* key is for closed captioning.

Location: Left patient siderail, right patient siderail.

To Activate: Press and release the *TV*, *Radio*, or *Select* key, as desired. The TV, radio, or closed captioning option will come on, as applicable.



Entertainment Controls

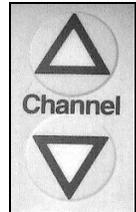
Patient Controls—Optional

Channel Controls

The optional *Channel* controls are used to select channels, or stations, on the TV or Radio.

Location: Left patient siderail, right patient siderail.

To Activate: Press and release the *Channel* up or down, as desired.



*Channel
Controls*

Volume Controls

The optional *Volume* controls are used to change the volume on the TV or Radio.

Location: Left patient siderail, right patient siderail.

To Activate: Press and release the *Volume* up or down, as desired.

NOTE:

The volume controls require that the *TV/Radio* key on the footboard control panel be activated (illuminated).



*Volume
Controls*

Safety

Bed Positions

**WARNING:**

Make sure the bed is in the low position when the patient is unattended. This can reduce the possibility of patient falls and the severity of any resultant injuries.

Siderails

**WARNING:**

Siderails are not intended to be used as restraint devices. Medical personnel should determine the appropriate use of siderails and ensure patient safety.

**CAUTION:**

Make sure that lines are not pulled or tangled during bed articulations. Always use good line management techniques, particularly as the head section rises.

Brakes

**CAUTION:**

Always set the brakes when the bed is occupied, except during patient transport. To help ensure the bed will not move, push and pull on the bed some to check it after the brakes are engaged.

Fluids

**CAUTION:**

Significant fluid spills onto the bed electronics can result in a hazard. If such a spill occurs, unplug the bed and remove it from service. Thoroughly clean the bed, and allow it to dry; then have the bed checked by service personnel.

When massive fluid spills occur on the bed, immediately:

- Unplug the bed from its power source.
- Remove the patient from the bed.
- Clean the fluid spill from the bed system.
- Have maintenance inspect the system completely.

Do not put the bed back into service until it is completely dry, tested, and determined to be safe to operate.

Safety

Electricity



CAUTION:

Unplug the bed from its power source before cleaning or service. Failure to do so could result in personal injury or equipment damage.



CAUTION:

Establish policies and procedures to train and educate your staff on the risks associated with electrical equipment.



CAUTION:

Significant fluid spills onto the bed electronics can result in a hazard. If such a spill occurs, unplug the bed and remove it from service. Thoroughly clean the bed, and allow it to dry; then have the bed checked by service personnel.

Lockout Controls

Activate the lockout controls at the footboard control panel to prevent a patient or visitor from operating the applicable patient controls.

Parts and Accessories

Use only Hill-Rom parts and accessories. Do not modify the bed system without authorization from Hill-Rom.

Operating Precautions



WARNING:

Do not operate the bed in the presence of flammable gas or vapors, because of the risk of fire or explosion. Personal injury could result.



WARNING:

Use oxygen-administering equipment of the nasal, mask, or ventilator type only. Do not use the bed with oxygen tents. Personal injury could result.

Transport

**CAUTION:**

The Advanta™ Bed is intended to be used to transport patients with the foot end of the bed forward. Prior to transport, properly store the power cord to help prevent tripping. Use only the headboard transport handles to move the bed during transport. Do not transport patients while the bed is in the chair position.

**CAUTION:**

Make sure that the patient, equipment, and all lines are securely placed within the perimeter of the bed for intra-hospital transport.

**CAUTION:**

If equipped with the utility shelf, secure all of the equipment on the shelf with straps, and observe the 45 lb (20 kg) weight limit. Keep the utility shelf horizontal during patient transport.

**CAUTION:**

Fully extended IV poles could impact doorways or ceiling fixtures. Lower the poles prior to patient transport.

**CAUTION:**

Be sure to connect the nurse call system cables after transport is complete.

Sleep Surface Mattress

Do not use mattresses, mattress overlays, mattress replacements, or specialty mattress products that have not been designed or authorized by Hill-Rom for use on the Advanta™ Bed. Use of sleep surfaces other than those designed for the Advanta™ Bed could substantially reduce the effectiveness of the safety features incorporated into the system.

**CAUTION:**

The sleep surface impermeability and pressure relieving capabilities could be affected by needle sticks or other bladder punctures. Caregivers should be instructed to avoid bladder punctures caused by needle sticks or improper use of x-ray cassette holders. The sleep surface should be regularly inspected for such damage.

General Cleaning/Disinfecting

General Cleaning/Disinfecting



WARNING:

Follow the product manufacturer's instructions. Failure to do so could result in personal injury or equipment damage.



SHOCK HAZARD:

Unplug the unit from its power source. Failure to do so could result in personal injury or equipment damage.



SHOCK HAZARD:

Do not expose the unit to excessive moisture that would allow for liquid pooling. Personal injury or equipment damage could occur.



CAUTION:

Do not use harsh cleansers/detergents, such as scouring pads and heavy duty grease removers, or solvents, such as toluene, xylene, and acetone. Equipment damage could occur.



CAUTION:

Ensure that the metal platform is dry before placing the mattress back onto the bed. Failure to do so could result in equipment damage.

If there is no visible soilage with possible body fluids, we recommend that you clean the unit with a mild detergent and warm water. If disinfection is desired, you may use a combination cleanser/disinfectant as explained in "Disinfecting" on page 46.

In either case, ensure that the metal platform is dry before placing the mattress back onto the bed.

Steam Cleaning

Do not use any steam cleaning device on the unit. Excessive moisture can damage mechanisms in this unit.

Cleaning Hard to Clean Spots

To remove difficult spots or stains, we recommend that you use standard household cleansers and a soft-bristled brush. To loosen heavy, dried-on soil, you may first need to saturate the spot.

Disinfecting

When there is visible soilage and between patients, we recommend that you disinfect the unit with a tuberculocidal disinfectant. (For customers in the US, the disinfectant should be registered with the Environmental Protection Agency.)

Dilute the disinfectant according to the manufacturer's instructions.

Cleaning Sleep Surfaces

To clean the sleep surfaces, use the following guidelines:

- Activate the *Auto Firm* function.
- Unplug the bed from its power source.
- To clean directly beneath the sleeping surface at the head end, lift the head end of the mattress.
- To clean directly beneath the sleeping surface at the foot end, remove the sleep surface mattress.

NOTE:

Never remove the air mattresses (ZoneAire® Sleep Surface) without disconnecting the hoses from the manifold assembly.

To remove the sleep surface mattress:

- Disconnect the quick-connect air hoses.
- Lift up on the foot and head ends of the sleep surface until the magnets inside the ticking are released from the frame. Slide the sleep surface off the articulating deck.

To replace the sleep surface mattress:

- Position the sleep surface on the bed frame. Be sure to orient the mattress properly.
- Connect the applicable quick-connect air hose connectors to the manifold assembly.

Cleaning Medical Fluid Spills



CAUTION:

Unplug the bed from its power source before cleaning or service. Failure to do so could result in personal injury or equipment damage.

Fluid spills should be wiped up as soon as possible. Unplug the Advanta™ Bed from its power source before cleaning up major fluid spills.

Temporary stains can be removed by wiping vigorously with a lightly-dampened sponge or rag, and an EPA registered cleaner/disinfectant solution.

Cleaning Blood and Excreta

If possible, wipe up blood and excreta when wet. Cleaning is more difficult after these substances dry on the surface.

Damage to the Sleep Surface Ticking

Tears, holes, and cracks in the sleep surface ticking compromise the sleep surface impermeability and infection resistance. Repairs to the ticking are not recommended.



CAUTION:

Periodically check the sleep surface to ensure that the ticking impermeability is not compromised.

Patient Education



PATIENT EDUCATION CARD

Your hospital has chosen Hill-Rom's Advanta™ Bed as an integral part of your stay. The Advanta™ Bed was designed and built with your comfort and safety in mind. This card is provided to help you, your family, and other visitors to better understand the controls on the bed and what they are used for.

THESE CONTROLS ARE THE ONLY BUTTONS TO BE USED BY THE PATIENT OR VISITOR.

	<p>Bed Controls</p> <p>Head up/ Down: Positions the head section of the bed. This control also changes the contour of the bed by raising the knee section simultaneously to keep you from slipping down towards the foot end of the bed.</p> <p>Knee Up/Down Positions the height of the knee section on the bed Note: These controls can be backlit for easier visibility at night. <i>WARNING: KEEP HANDS, FEET AND ALL ITEMS AWAY FROM MOVING PARTS WHEN OPERATING CONTROLS. SERIOUS INJURY OR EQUIPMENT DAMAGE MAY RESULT!</i></p>
<p><input type="radio"/> Call</p> <p><input type="radio"/> Answer</p>	<p>Nurse Call Control (Note: Your bed may not have this control.)</p> <p>The Nurse Call control is used to contact a nurse. It is connected to the nurses station and will notify them that help is needed. When you press the button, the "Call" light will illuminate indicating your call has been placed. When the nurse's station responds to your call, the "Answer" light will illuminate. While the nurse is speaking, the entertainment speaker will automatically be muted.</p> <p><i>WARNING: ALWAYS USE THE NURSE CALL CONTROL FOR ASSISTANCE IF YOU NEED TO EXIT THE BED WHEN THE SIDERAILS ARE IN THE "UP" POSITION. SIDERAILS CANNOT BE LOWERED BY THE PATIENT. SERIOUS INJURY MAY RESULT!</i></p>
<p> Room</p> <p> Read</p>	<p>Lighting Controls (Note: Your bed may not have these controls.)</p> <p>Room Light Turns the room, or indirect lighting on and off.</p> <p>Read Light Turns the read, or direct, lighting on and off.</p> <p>Note: These controls can be backlit for easier visibility at night.</p>
<p> </p>	<p>Entertainment Controls (Note: Your bed may not have these controls.)</p> <p>TV Control Turns the television on and off.</p> <p>Radio Control Turns the radio on and off.</p> <p>Select Ask the nurse for your bed's particular function.</p>
<p> Volume</p> <p> Channel</p>	<p>Volume Up/Down Allows you to turn the volume up and down. Pressing the volume down control will decrease the volume at a more rapid rate than the volume up control increases it.</p> <p>Channel Up/Down Allows you to adjust the channels up and down.</p>

Note: Your bed may include the Patient Position Monitor as an option. This function constantly monitors the patient's position in the bed when activated. Additional weight to the bed will sound a local alarm. Once the additional weight is removed, the alarm will stop.



REMEMBER, THE BED IS A PIECE OF MEDICAL EQUIPMENT; MISUSE OR ABUSE COULD CAUSE SERIOUS INJURY. IF AN ALARM SOUNDS ON THE BED, DO NOT ATTEMPT TO SILENCE IT; CONTACT YOUR NURSE IMMEDIATELY.

NOTES:

Hill-Rom[®]

A HILLENBRAND INDUSTRY

1069 STATE ROUTE 46 E
BATESVILLE, IN 47006-9167 USA

Rental: (800) 638-2546

USA: (800) 445-3720

Canada: (800) 267-2337

International: Contact your distributor.

www.hill-rom.com

usr017rb/September, 2002

Hill-Rom Services, Inc. (Hill-Rom) reserves the right to make changes without notice in design, specifications, and models. The only warranty Hill-Rom makes is the express written warranty extended on the sale or rental of its products. The information in this manual is confidential and may not be disclosed to third parties without the prior written consent of Hill-Rom.

© 2002 by Hill-Rom Services, Inc. ALL RIGHTS RESERVED.