

**OnCare™** Smarter Products.  
Better Performance.



## Harmony™ Low Bed User Manual

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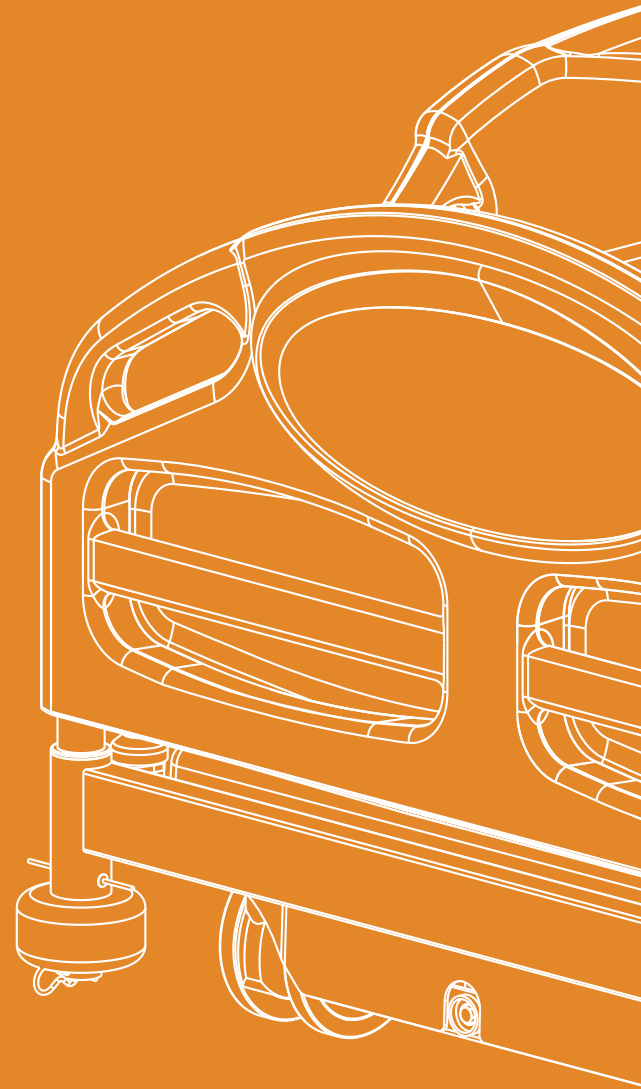
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# Harmony™ Low Bed



## 1.0 INTRODUCTION

The OnCare™ Harmony™ Low Bed rises above typical acute care beds with a long list of innovative standard features to help caregivers achieve optimum patient safety. A minimum deck height below 10", bed exit alarm and triple-guard anti-entrapment system help minimize patient injuries. In addition, easy-to-use controls, such as the one-touch electronic central brake and steer, let caregivers focus on patient care. These features give you a smarter, better-performing option for acute care: the Harmony Low Bed.

## 1.1 Product Features and Specifications

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### STANDARD FEATURES

- Integrated bed exit alarm
- Integrated patient scale
- Nurse call integration
- Electronic central brake and steer
- Triple-guard anti-entrapment system
- Manual and electronic CPR release
- Transportability at any height
- Antimicrobial plastic surfaces
- Under bed light
- Integrated USB port
- Fully electric articulation
- Integrated IV pole
- Integrated pump holder
- Bed length extension
- Auto contour
- Auxiliary power outlet
- Patient control hand pendant

### OPTIONAL

- Trapeze/Patient helper

### SPECIFICATIONS

Deck Height:	
Low	9.875"
High	31.5"
Overall Length	91.75"
Overall Width	40.5"
Sleep Deck	35" x 80" (expandable to 88")
Weight Capacity	400 lbs.
Head Section Adjustment	0°–70°
Knee-Gatch Adjustment	0°–35°
Trendelenburg and Reverse Trendelenburg	14°
Caster Diameter	5"

### ELECTRONICS








Volts	120 VAC
Ampere Rating	5.0 Amps @ 120 VAC 60Hz or 600 VA (Max Power Limit)
Patient Touch Current Leakage	<100 microamps

Note: Specifications subject to change without notice.

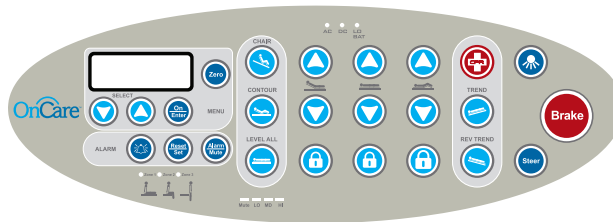
## 1.2 Quick Reference Guide





### Harmony™ Low Bed Quick Reference Guide



-  **HEAD ANGLE**  
Press and hold to change the head angle.
-  **BED HEIGHT**  
Press and hold to move the bed up and down.
-  **KNEE-GATCH**  
Press and hold to change the knee-gatch angle.
-  **CHAIR**  
Press and hold to move to chair position.
-  **CONTOUR**  
Press and release to enable the function (back light will change to green), then press and hold head buttons to change head angle.
-  **LEVEL ALL**  
Press and hold to synchronize head and knee-gatch movement to horizontal.
-  **TREND**  
Press and hold either of the trendelenburg buttons to set appropriate angle shown on the digital display.

#### BED FUNCTIONS (Foot Board Panel)



-  **LIGHT**  
Press and release to switch under bed light on/off.
-  **BRAKE**  
Press and release to set brake on/off. When off, white back light will flash.
-  **STEER**  
Press and release to set one foot end caster to a rotational lock position.
-  **CPR**  
Press and hold to move the bed to a low level horizontal position.



### Harmony™ Low Bed Quick Reference Guide



#### WEIGH SCALE (Foot Board Panel – Caregiver)




With bed mattress, pillow and linen in-place perform the following set-up prior to placing the patient on the bed.

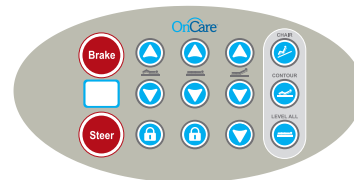
-  **ZERO THE BED**  
Press and hold until the countdown begins, then release. Once the bed is zeroed, it is patient ready.
-  **WEIGH PATIENT**  
Press and release the ON/ENTER button and patient's weight will be shown on the digital display.

#### EXIT ALARM (Foot Board Panel – Caregiver)




-  **SET SENSITIVITY**  
Press and release the RESET/SET button multiple times to select and set the appropriate zone sensitivity option: zone 1 (5 kgs.), 2 (5%) or 3 (45%). An indicator light with patient position symbol will display the zone selected.

#### PATIENT'S SIDE RAIL



Button groups, symbols and functions are the same as "BED FUNCTIONS (Foot Board Panel)" on side one.

-  **STEER**  
Press and release to set one foot end caster to a rotational lock position.

Please see user manual for further operating instructions and [www.oncaremedical.com](http://www.oncaremedical.com) for additional product information. For further questions, please call your local UHS office or call 1.800.847.7368.

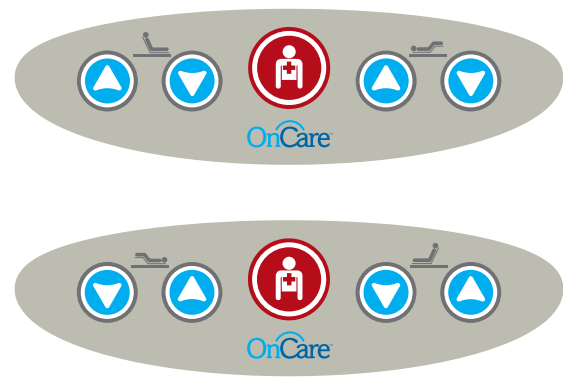
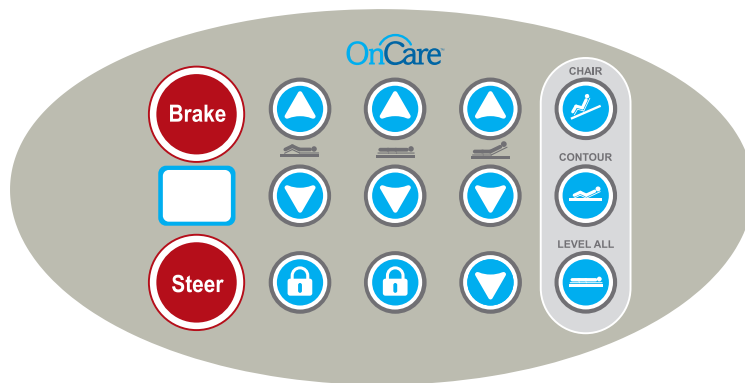
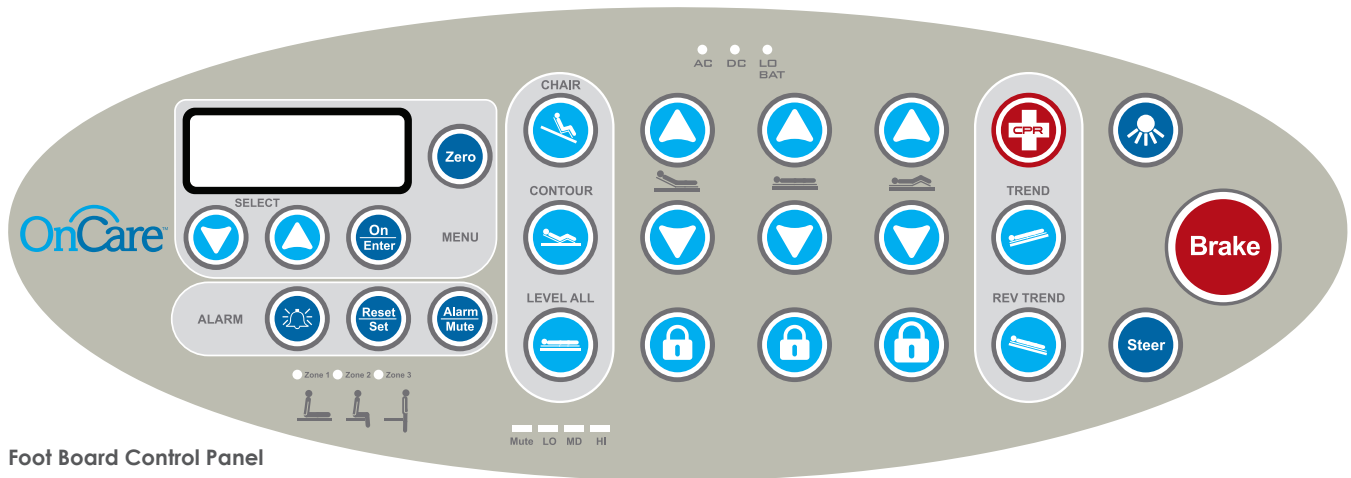
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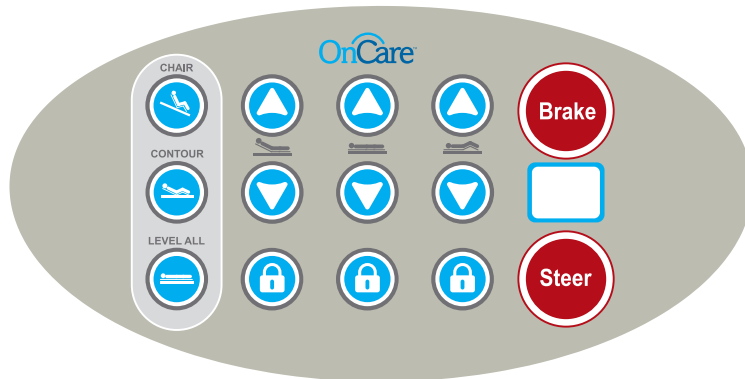
## 2.0 QUICK START SET UP

1. Plug bed into wall electrical outlet
2. Place all linens and accessories on bed
3. Zero the bed scale (See 3.15)
4. Lower bed to appropriate transfer height
5. Lock casters by pushing "Brake" button
6. Bed is now ready for patient use

## 3.0 HARMONY LOW BED CONTROLS



**Patient Side Rail  
Patient Control Panels (Head End)**



**Caregiver Side Rail  
Outboard Control Panels (Head End)**



### 3.1 Head Angle Adjustment

**Function:** The head angle adjustment buttons allow the head section to move up or down.

**Operation:** Press and hold to move the head section to the desired angle. The degree of head section angle will be displayed in the control panel window located on the head end caregiver side rails. The head of bed angle can be adjusted between 0° and 70°.

NOTE: When operating the head angle adjustment, the base of the head section slides progressively towards the head end of the bed. This action stretches the length of the pelvic section of the bed and helps prevent compression of the abdomen.



### 3.2 Bed Deck Height Adjustment

**Function:** The bed deck height adjustment buttons allow the bed's height to be adjusted between 9.875" and 31.5".

**Operation:** To move the bed deck up or down, press and hold the appropriate button on the control panel with the symbol depicted.



### 3.3 Knee-Gatch Adjustment

**Function:** The knee-gatch adjustment buttons allow the thigh section to be adjusted between 0° to 35°.

**Operation:** To move the knee-gatch section up or down, press and hold the appropriate button with the symbol as depicted.



### 3.4 Chair

**Function:** Chair positioning provides synchronized movement of the head section, knee-gatch and Reverse Trendelenburg in one operation.

**Operation:** Press and hold to move the bed into a chair position.

NOTE: When operating the chair button, the base of the head section slides progressively toward the head end of the bed. This action stretches the length of the pelvic section of the bed and helps prevent compression of the abdomen.



### 3.5 Contour

**Function:** Contour positioning provides synchronized movement of the head section and knee-gatch in one operation.

**Operation:** Press and release to enable the function (back light color changes to green), then press and hold the head section up button until correct angular position is reached. To lower, press and hold the head section down. (See 3.1) To disable the function, press and release the contour button again (back light color changes to white).





### 3.6 Level All

**Function:** Level all positioning provides synchronized movement of the head section and knee-gatch in one operation to achieve a horizontally flat bed deck.

**Operation:** Press and hold to move the bed deck into a horizontally flat position (head and knee-gatch only).

NOTE: Level all does not adjust the Trendelenburg position. (See 3.7)



### 3.7 Trendelenburg

**Function:** The Trendelenburg button allows the bed to be positioned in a head down/foot up position. Trendelenburg position is achievable between 0° and 14°.

**Operation:** Press and hold to move the bed deck to the desired angle, digitally displayed briefly in the control panel window.

NOTE: To reverse the Trendelenburg angle, press the Reverse Trendelenburg button. (See 3.8) When reversing the bed deck angle (toward Reverse Trendelenburg), it will automatically stop at the 0° horizontal position. To continue in the same direction, press and hold to move bed to the appropriate position.



**CAUTION:** The Trendelenburg positions should only be set under clinical advisement.



### 3.8 Reverse Trendelenburg

**Function:** The Reverse Trendelenburg button allows the bed to be positioned in a foot down/head up position. Reverse Trendelenburg position is achievable between 0° and 14°.

**Operation:** Press and hold to move the bed deck to the desired angle, digitally displayed briefly in the control panel window.

NOTE: To reverse the Reverse Trendelenburg angle, press the Trendelenburg button. (See 3.7) When reversing the bed deck angle (toward Trendelenburg), it will automatically stop at the 0° horizontal position. To continue in the same direction, press and hold to move bed to the appropriate position.



**CAUTION:** The Trendelenburg positions should only be set under clinical advisement.



### 3.9 Under Bed Floor Lighting

**Function:** Under bed floor lighting provides illumination to the area beneath the bed. The bed exit alarm will also automatically turn the light on. It will remain on for 30 minutes unless the alarm is turned off and then the light button is pressed.

**Operation:** Press and release the appropriate button to turn the light on/off.



### 3.10 Brake

**Function:** The brake button locks wheels to prevent movement.

**Operation:** Press and release to lock/unlock all wheels.

NOTE: When the brake lock is disengaged, the button will flash white. When the brake lock is engaged, the button will illuminate solid red.



### 3.11 Steer

**Function:** The steer button locks a foot end wheel into straight alignment for easier bed navigation.

**Operation:** Press and release to turn the foot end steer function on/off.



### 3.12 CPR

**Function:** The CPR button lowers the head of bed angle and knee-gatch to flat, then lowers the deck height.

**Operation:** Press and hold to flatten the head of bed and knee-gatch. Once the knee and head sections are flat, the bed deck will lower. If the button is released, the bed will stop. Press and hold the button until the desired position is reached.



### 3.13 Nurse Call Button

**Function:** The nurse call button sends a signal to the nurse call system when pressed. Please note this feature will only communicate when properly connected to a nurse call system. (See 7.1)

**Operation:** Press and release to send a signal to the nurse call system.



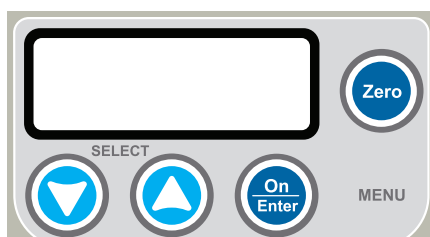
### 3.14 Function Lockout

**Function:** The function lockout button disables operation of one or more bed functions.

**Operation:** Press and release the lock button under the head angle, bed deck height or knee-gatch buttons to lockout individual controls. To release the lockout, press and release the same button again. This function can be enabled or disabled from either the side rail or foot board control panels. To lockout all functions, press and hold any adjacent set of two lockout buttons simultaneously. Repeat to unlock all functions.

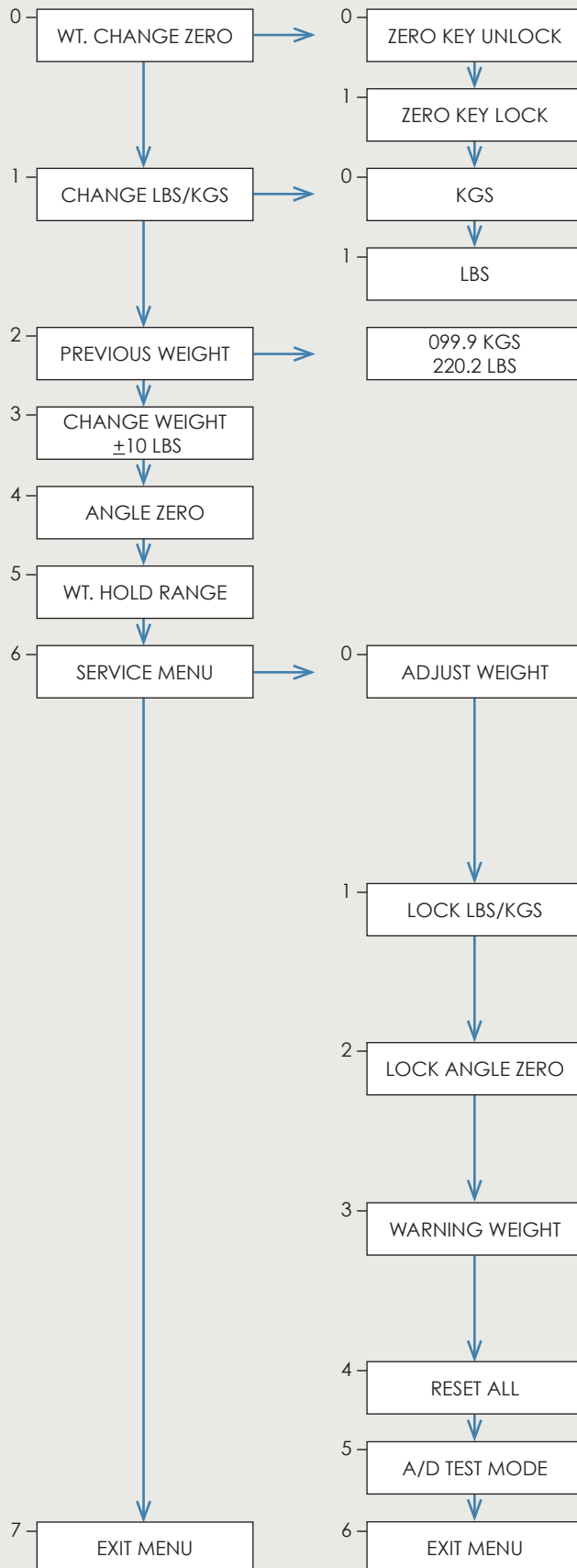
### 3.15 Patient Scale

The patient scale monitors and records the weight and weight change of a patient.




### 3.15.1 Patient Scale Menu Options

Main menu and sub-levels of the scale system



### 3.16 Patient Scale Display and Function (New Patient)

NOTE: With bed mattress, pillow and linen in-place, perform the following set up prior to placing the patient on the bed.

- 1 Press and hold  until countdown begins, then release. Display counts down from 5-0 seconds, visually resetting the weight to zero (0.0 lbs).

NOTE: The bed is now ready to place patient on mattress.




- 2 Place patient on bed and allow for the displayed weight in the window to remain constant. A symbol “^” under the displayed weight of the new patient will appear indicating a stabilized value has been recorded; at this moment, the value will be saved and locked into the scale memory automatically. The bed exit alarm can now be set.

- 3 Check patient's data:




#### a) Patient's Weight:

Press and release  button to display patient weight.

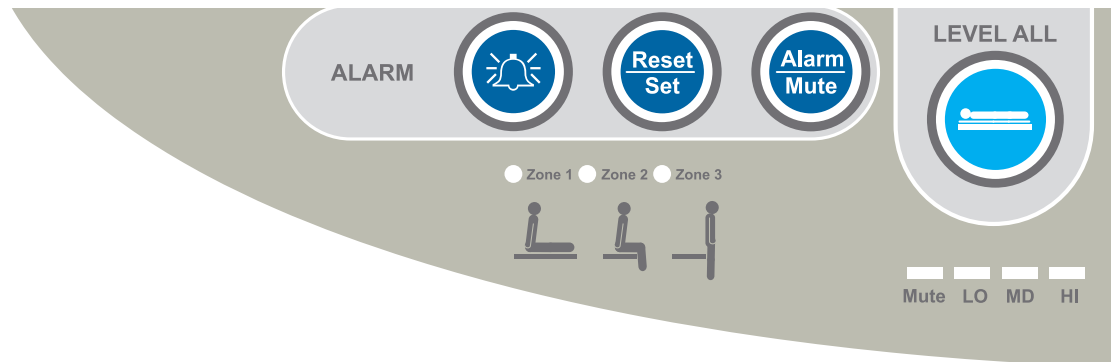
#### b) Patient's Weight Change:

Press and release  button twice to display options. Press and release   to scroll through the menu, find “Change Weight” and the patient's weight change is displayed.




#### To exit menu:

Press and release   to scroll through menu. Select “Exit Menu,” then press and release  button. Upon exiting the menu, patient's weight will be displayed again briefly.

## 3.17 Bed Exit Alarm System



### 3.17.1 Bed Exit Alarm Function and Settings

- a) With patient in bed, press and release the  button, and scroll through the zones to select the appropriate sensitivity (zone 1, 2 or 3). An indicator light will illuminate next to the selected zone.
- b) Select the appropriate audio volume level by pressing the  button as needed to scroll through the options (mute, low, med and hi). An indicator light will be seen showing the selected level is activated, including the mute mode (in this mode the exit alarm will only activate through the nurse call system if connected).
- c) The alarm can be muted by pressing and releasing the  button. The button's light color will change to green indicating that the audio is off, but the exit alarm remains active if connected to the nurse call system.

## 4.0 BATTERY BACKUP SYSTEM

The bed is equipped with a battery backup system, which allows the electrically operated functions to be used when the bed is disconnected from the main power source. The bed transitions between main power and battery power automatically. To charge the battery, connect the power cord to an AC power outlet receptacle. The bed should be plugged in as often as possible to maximize battery life. If the bed is not used for a long period of time, it is recommended that the battery be charged at least 24 hours before operating on battery power.

NOTE: Keep the bed plugged into a main power receptacle for optimum performance and higher adjustment speeds.

Bed adjustments will be slower when the power cord is unplugged and the bed is powered from its battery backup system.

## 5.0 MANUAL BED CONTROLS

Certain features of the bed can be controlled manually.

### 5.1 Side Rails

The standard split side rails have three positions: up, mid-level and down. When the side rail is raised to its mid-level or up position, it will automatically lock.

#### Side Rail Operation

NOTE: Holding the lever down will allow you to bypass the mid-level position from either the up or down position.

#### From up position to mid-level position:

While holding the upper hand-hold of the side rail, push the green "PUSH" lever with either the hand or thigh to release and lower to the mid-level position. The lever will automatically click into its locked position.

#### From mid-level position to down position:

While holding the upper hand-hold of the side rail, push the green "PUSH" lever with either the hand or thigh to release and lower to the down position. (There is no lock in this position.)

#### From down position up to mid-level position:

While holding the upper hand-hold of the side rail, lift the side rail to the mid-level position, the "PUSH" lever will automatically click into its locked position.

#### From mid-level position to up position:

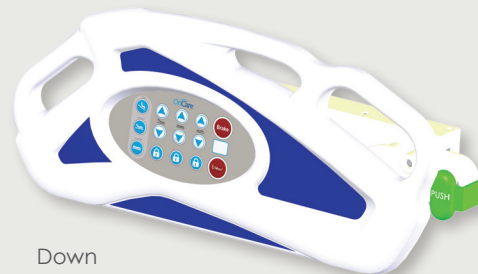
While holding the upper hand-hold of the side rail, push the green "PUSH" lever with either the hand or thigh to release, lifting the side rail to the up position, the "PUSH" lever will automatically click into its locked position.



Up



Mid-Level



Down

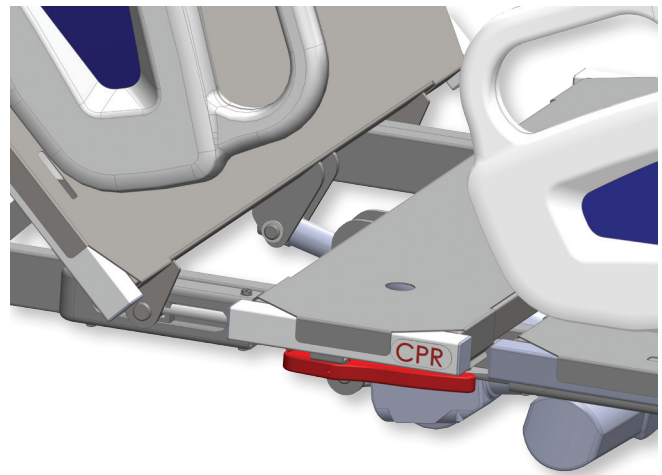
## 5.2 Manual Cardiopulmonary Resuscitation (CPR) Function

The emergency CPR release handles are positioned in the pelvic area on both sides of the bed. The manual release function returns the bed's head section to a fully down position in the event of an emergency resuscitation. To manually lower the head section in an emergency, pull out one of the red release handles marked "CPR."

NOTE: If manual CPR is utilized, the side rail will display the last head of bed angle position. To reset the display, press and hold the head down button on the caregiver side rail control panel.

 **CAUTION:** The head section will lower quickly – keep fingers clear to avoid pinching.

Alternatively, the CPR function can be activated electrically from the foot board control panel. Press and hold the red CPR button to move the bed into the desired height. If the button is released, the bed will stop. Press and hold the button until the desired position is reached. (See 3.12)



## 5.3 Foot Extension (Bed Deck)

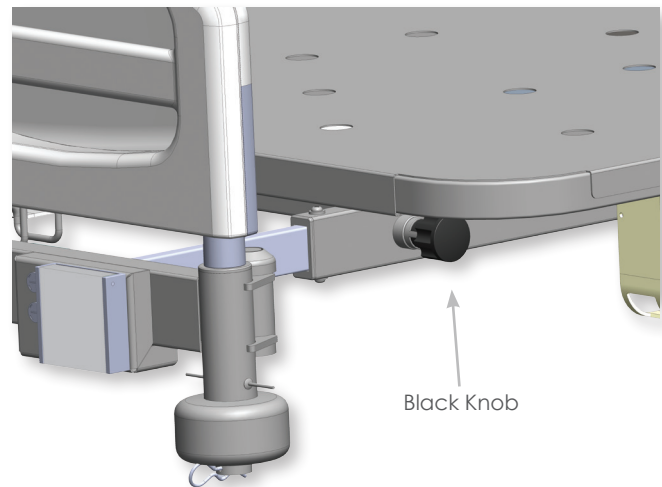
The bed deck length is expandable from 80" - 88".

### 5.3.1 To Extend

While reaching under the foot end right side of the bed deck, firmly grasp the black knob labeled "Pull and Twist CCW." To release, twist knob clockwise (CW). To lock, pull and twist counter clockwise (CCW).

On the foot board control panel, firmly grasp the lower vertical corners of the foot board and pull out gently 2". Reach again under the foot end right side, grasp the black knob and twist CW. Pull the extension out until you hear the pin lock into place.

To confirm that the locking pin on each side is engaged, gently push the foot board backwards and forwards. Finally, insert an extension deck plate and a mattress bolster to fill the gap exposed by extending the foot section.

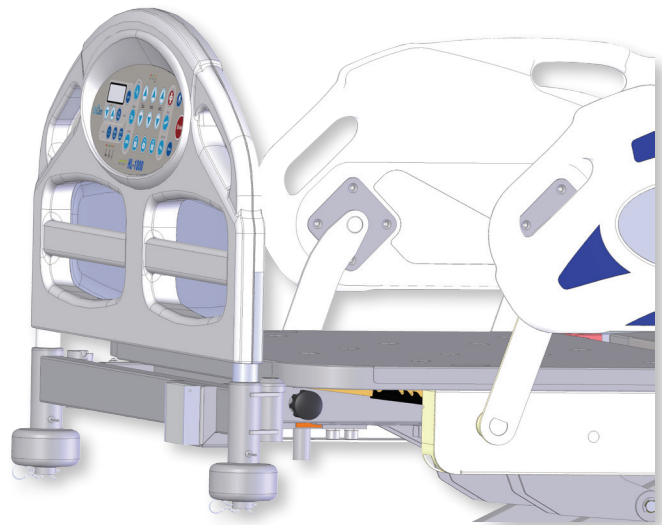


### 5.3.2 To Retract

Reverse the procedure above. (See 5.3.1)

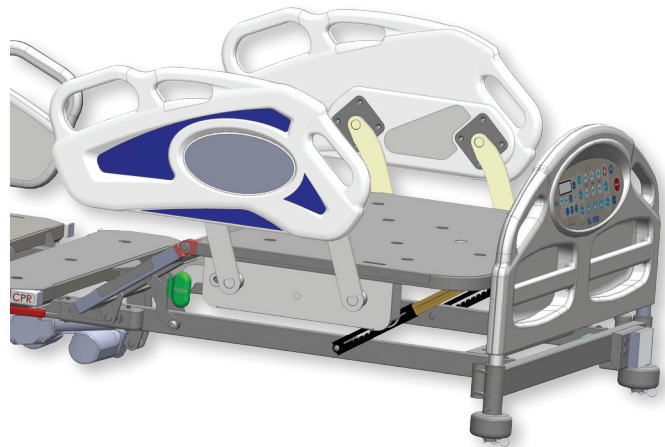
## 5.4 Foot Section Height Adjustment

The foot section angle is adjustable when the knee-gatch section of the mattress support surface is elevated.



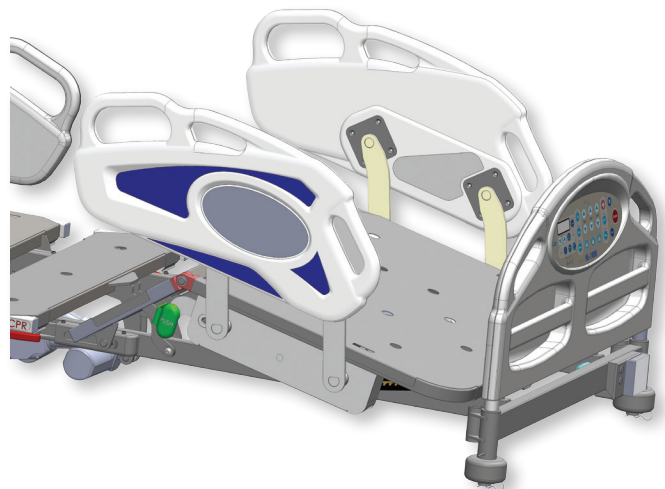
### 5.4.1 To Elevate Foot Section Horizontally

While grasping the outer edges of the foot section panel close to the foot board, lift upwards slowly to an elevation angle slightly past the desired position. The foot section has two ratchet struts that will produce a clicking sound as the spring-loaded locking mechanisms travel past the range of available locking positions. Once the desired position has been reached, gently allow the foot panel to lower. The locking mechanism will automatically find the first available ratchet position.



### 5.4.2 To Lower Foot Section

While grasping the outer edges of the foot section panel close to the foot board, lift upwards slowly to release the spring locking mechanism. Then, slowly lower the panel until firmly returned to its original position resting on the main frame.





## 5.5 Manual Brake Release

In the event that the bed loses power and the battery is drained with the brake engaged, check for available power sources. Make sure the power cord is securely inserted in an outlet. If power is not available, you must use the manual brake release in order to disengage brake.

To manually release the brake, remove the black plastic circular cover located at the foot/head ends of the bed between the two wheels. Note the label reading “MECHANICAL BRAKE OVERRIDE SOCKET.”

Slide the 11 mm socket wrench from the storage bracket located behind the head/foot wheel assembly. Use the wrench to turn the override socket clockwise 1/4 turn. Repeat at the other end of the bed and the brake will be released. To re-engage the electronic braking system, return the manual release to its original position by turning it counter clockwise 1/4 turn.



## 6.0 HANDSET OPERATION

Motion occurs only while a button is pressed and held. Motion will stop when the button is released or the applicable bed section reaches the end of its range of motion. The nurse call function is also found on the handset. (See 1.13)



Handset

## 7.0 ADDITIONAL FEATURES

### 7.1 Nurse Call Connectivity

To connect bed to a nurse call system, a standard 37 pin connection and 1/4" jack are located at the head end of the bed below the patient deck. When connected, bed will send an alarm signal to the nurse call system if nurse call button is pressed on the patient control panel or the patient control hand pendant. In addition, the nurse call system will be signaled if bed exit alarm is triggered.

### 7.2 Triple-Guard Anti-Entrapment System

The bed is equipped with a comprehensive anti-entrapment system that implements three separate mechanisms to reduce the chance of objects becoming entrapped under the bed frame.

#### a) Optical Sensors

Six sets of optical sensors are positioned under the bed frame. These sensors emit a light beam that, when interrupted, will prohibit the bed from lowering. If the light beams are interrupted while the bed is in the process of lowering and has traveled at least 4 inches below the highest bed height setting, the bed will stop and raise approximately 1.5 inches to free any potential obstruction.

#### b) Pressure Plates

Pressure plates are positioned over each of the two caster sections. When an object comes into sufficient contact with a pressure plate, the bed will not lower. If the bed is in the process of lowering and has traveled at least 4 inches below the highest bed height setting, the bed will stop and raise approximately 1.5 inches to free any potential obstruction.

#### c) Weight Scale System

The weight scale system is designed to detect when the bed frame comes into contact with an object while lowering. If that occurs, the bed will stop lowering. If the bed is in the process of lowering and has traveled at least 4 inches below the highest bed height setting, the bed will stop and raise approximately 1.5 inches to free any potential obstruction.

### 7.3 Antimicrobial Plastic Surfaces

The surfaces of the side rails and footboards are embedded with Nano Ag antimicrobial granules to inhibit the growth and potential colonization of mold, bacteria and/or fungus (example: Staphylococcus aureus). The synthetic antimicrobial granules (1% by weight) are directly mixed into the thermoplastic polymer compound during production, so the potential for bacteria to exist on the treated material is dramatically reduced.

### 7.4 Integrated USB Port

Integrated USB ports located on each of the patient side rail controls provide power to USB enabled portable electronic devices. To utilize the USB port, slide the port cover to open position and insert a USB cable into port. Connect cable to electronic device such as a phone or music player.

## 7.5 Integrated Pump Holder

The footboard of the Harmony Low Bed features an integrated pump holder designed to easily attach most air mattress pumps, sequential compression devices (SCDs), and other equipment designed to be hung on a bed frame. If a specific pump does not securely attach to the integrated pump holder, an optional attachment is also available.

## 7.6 Auxiliary Power Outlet

The Harmony Low Bed is equipped with a 110v auxiliary power outlet. The outlet receives power through a dedicated black power cord. If the auxiliary power outlet is not powering a device, check that the black power cord is plugged into a power supply and that the circuit breaker (located next to the power outlet) does not need to be reset.

## 7.7 Optional Trapeze/Patient Helper

The optional trapeze/patient helper has a limited safe working load. Refer to trapeze label for specific weight capacity. The trapeze handle height can be adjusted by shortening the chain length. To shorten the chain length, grasp the handle and position at the desired height, then hang the appropriate chain link on the hook located on the patient helper bar.

The trapeze has three positions:

**a) Centered**

Positions the trapeze above the patient's upper torso to provide assistance during positioning.



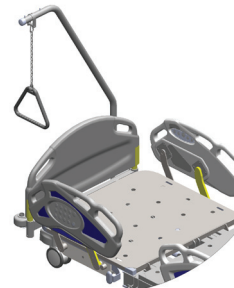
**b) Off set**

Positions the trapeze and patient helper bar to the side of the bed for assistance during egress.



**c) Storage**

Positions the patient helper behind the head board, allowing clear patient access to caregivers.



## 8.0 CLEANING PROCEDURES

Eye protection must be worn at all times during the cleaning and disinfection process.

 **CAUTION:** Avoid the use of running water and/or pouring disinfectant liquids during the cleaning process of the bed frame sections.

### 8.1 Recommended Clinical Disinfection Liquids

- a) Quaternary Ammonium Disinfectant
- b) Activated Hydrogen Peroxide
- c) Sodium Hypochlorite (bleach) 1:10 ratio with water

NOTE: Specific disinfectants may be required by individual clinical facilities.

 **CAUTION:** Make sure to follow manufacturers' instructions when mixing and using cleaning/disinfecting products for optimal results.

 **CAUTION:** Prior to the commencement of any disinfection process, make sure the power cord is disconnected.

 **CAUTION:** Wear appropriate protective gloves, safety glasses and other personal protective equipment at all times during the cleaning/disinfection process.

### 8.2 Disinfecting

Use of a microfiber washcloth is recommended during the cleaning and disinfection process. For the removal of stubborn stains, use a soft bristle brush.

### 8.3 Rinsing

Avoid the use of running water or pressurized spray. Always rinse with a clean microfiber washcloth.

 **CAUTION:** Allow for sufficient drying time before any reintroduction of the bed frame into a clinical environment.

*Always use caution to avoid the potential of cross contamination.*

## 9.0 WARRANTY AND SERVICE

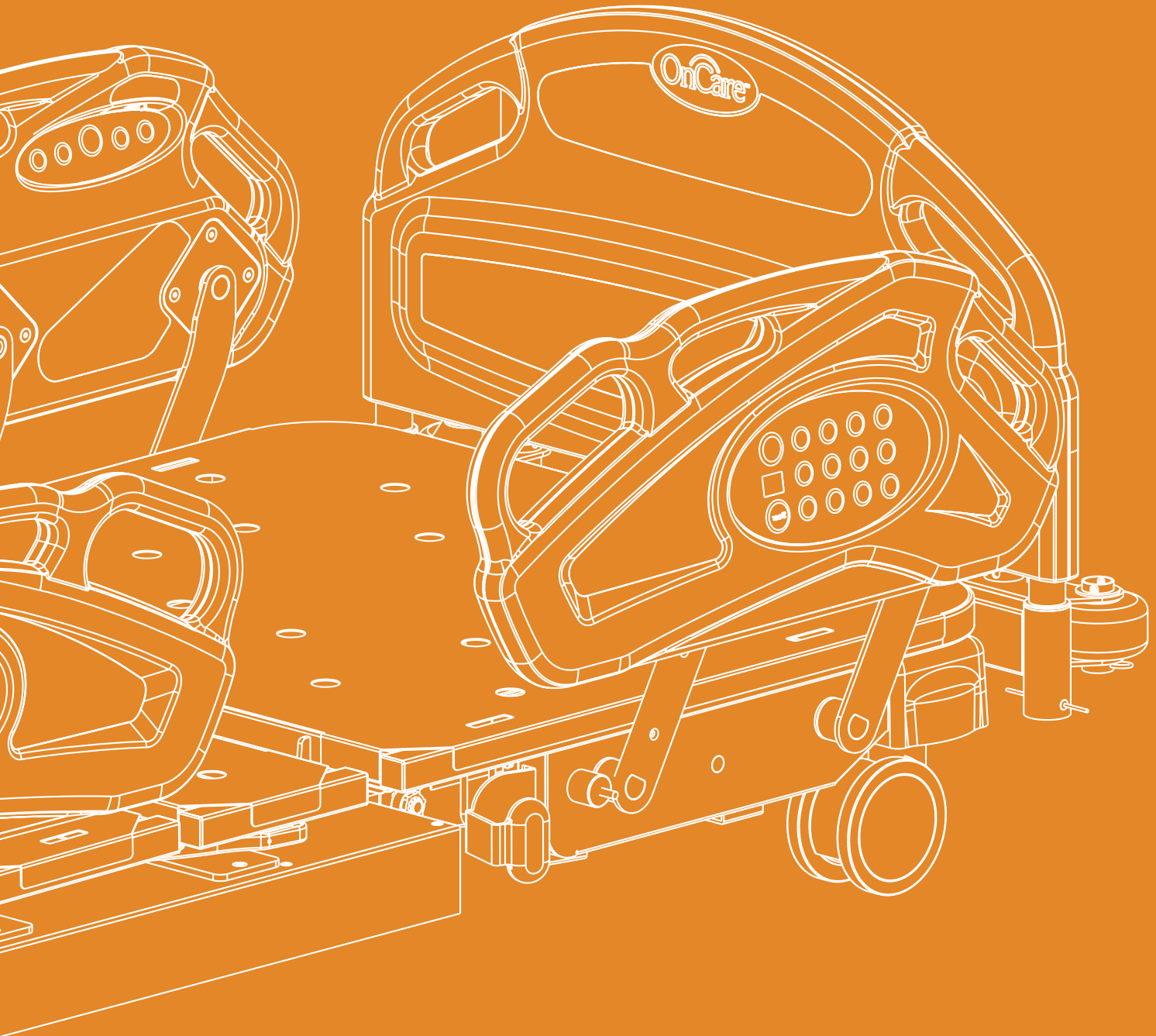
For service, maintenance, warranty and any questions regarding this product, please contact:



Universal Hospital Services, Inc. (UHS)  
6625 West 78<sup>th</sup> Street, Suite 300  
Minneapolis, Minnesota 55439  
Phone: 952-893-3200 & 800-847-7368  
Fax: 952-893-0704

For complaints or reportable events, please contact:

Prius Healthcare USA  
580 Corporate Center  
4025 Tampa Road, Suite 1117  
Oldsmar, FL 34677  
Phone: 813-854-5464  
Fax: 813-854-5442





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