
USER MANUAL

Resident® LTC Bed From Hill-Rom



Product No. P870

146481 REV 1

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To order additional copies of this manual (146481), refer to the back cover for contact information. For countries not listed on the back cover, contact your distributor.

NOTE:

The back cover is a comprehensive list of Technical Support contact information for Hill-Rom. The product discussed in this manual may not be available in all of the countries listed.

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Document Symbols

This manual contains different typefaces and symbols to make the content easier to read and understand:

- Standard text—used for regular data.
- **Boldface text**—emphasizes a word or phrase.
- **NOTE:**—sets apart special data or important instruction clarification.
- WARNING, RELATIVE CONTRAINDICATION, or CAUTION



- A WARNING identifies situations or actions that may have an effect on patient or user safety. To ignore a warning could cause patient or user injury.
 - A RELATIVE CONTRAINDICATION identifies situations or actions that may have an effect on patient safety.
 - A CAUTION identifies special procedures or precautions that persons must obey to help prevent equipment damage.
- CAUGHT HAZARD WARNING



- CHEMICAL HAZARD WARNING



- ELECTRICAL SHOCK HAZARD WARNING



Intended Use

The Resident® LTC Bed gives a unique combination of function, aesthetics, durability, and value to enhance the relationship between the patient and the long-term care facility. It offers a comfortable work height for caregivers and easy access for the patient.

Introduction

This manual gives the data necessary for normal operation of the Resident® LTC Bed from Hill-Rom. Before the bed is put into use, be sure that the contents of this manual have been read and understood in detail. It is important that one reads and strictly follows the aspects of safety contained in this manual. Any reference to a side of the bed is from the patient's view lying in the bed on his or her back.

Patient Characteristics

This bed can be used for patients who are 54" (137 cm) to 74" (188 cm) tall and whose width is no more than 36" (91 cm).

The safe working load (SWL) of the bed is 400 lb (181 kg). The SWL includes patient weight, mattress, IV pumps, poles, bags, etc.

Features



Standard Features

- Three adjustable sections (head, knee, foot), with separate articulation of head and knee for personalized comfort
- Automatic contour
- Easy to see and use operation controls
- Foot-end lockout panel
- Floor brakes
- 3" (8 cm) casters
- Wall bumper
- Head angle indicator
- 36" x 80" (91 cm x 203 cm) sleep deck

Optional Features

- Century- or Hearthside-style head- and footboards with laminate options
- Pendant control
- Sleep surface frame options
 - Spring fabric frame
 - Hard pan sleep deck frame
- Battery backup device
- Mattress options
 - PRIMA® Prevention Mattress Series
 - PRIME·AIRE® Therapy Surface

Accessories

- Half-length head-end rails
- Assist bar
- Headboard extender bracket
- Headboard/footboard bracket kit
- Trapeze support bracket with roller bumpers
- Fracture frame adapter
- ISS transfer pole
- Infusion support system offset bar
- Telescopic IV pole
- Trend adapter
- Mattress retainers
- Bed extender—12" (30 cm)

Safety Tips

To help prevent the risk of bed fires, make sure persons follow the safety tips in the *FDA Public Health Notification: Safety Tips for Preventing Hospital Bed Fires*. (US only)

NOTE:

Before operation of the bed, one should read and fully understand the contents of this manual. It is very important to obey the safety information in this manual.

▲ RELATIVE CONTRAINDICATION:

Use of active therapy surfaces with patients with unstabilized spinal cord injury could cause serious injury to the patient.

▲ WARNING:

Evaluate patients for entrapment risk according to facility protocol, and monitor patients appropriately. Make sure all siderails are fully latched when in the raised position. Failure to do either of these could cause serious injury or death.

NOTE:

Siderails are intended to be a reminder to the patient of the unit's edges, not a patient-restraining device. When appropriate, Hill-Rom recommends that medical persons determine the correct methods necessary to make sure a patient remains safely in bed.

▲ WARNING:

Always put siderails in the up position when a patient is unattended. Failure to do so may cause injury.

▲ WARNING:

Electric or manual drive bed mechanisms may cause serious injury if operated incorrectly. Operate the bed only when persons are away from the mechanisms.

▲ WARNING:

It is recommended that the bed be in the low position when the patient is unattended. This may reduce the severity of any resultant injuries from patient falls.

▲ WARNING:

When the bed height is changed, make sure hands and personal belongings are away from the frame assemblies. Failure to do so may cause injury or equipment damage.

▲ WARNING:

When the bed is moved, guide it from the corners near the foot end of the bed. This method will help keep legs and feet away from the frame and caster base. Failure to do so may cause injury.

⚠ WARNING:

This bed is not intended to be used as a transport device for persons. Injury may occur if the bed is moved with persons on bed.

⚠ WARNING:

Always set the brakes when the bed is occupied. Make sure the brakes are set before any transfer. Failure to do so could cause injury or equipment damage.

⚠ WARNING:

Only authorized persons should service this bed. Service done by unauthorized persons could cause injury or equipment damage.

⚡ SHOCK HAZARD:

The potential for electrical shock exists with electrical equipment. Failure to obey facility protocols may cause death or serious injury.

⚡ SHOCK HAZARD:

Before you clean the bed, unplug the bed from its power source and, if the bed has the optional battery backup, activate the lockouts to prevent accidental operation. Failure to do so may cause injury or equipment damage.

⚡ SHOCK HAZARD:

Do not expose the unit to excessive moisture. To do so may cause injury or equipment damage.

⚠ CAUTION:

Do not use harsh cleansers, solvents, or detergents. Use of harsh cleansers, solvents, or detergents may damage equipment.

⚠ CAUTION:

Do not remove the bumper assembly. Failure to do so may cause equipment damage.

Instructions for Use—Standard Features

SHOCK HAZARD:

One of the risks associated with the use of electrical equipment includes the potential for electrical shock. Train and educate the staff on the risks associated with electrical equipment. Failure to do so may cause injury.

WARNING:

Electric drive bed mechanisms may cause serious injury if operated incorrectly. Operate the bed only when persons are away from the mechanisms.

WARNING:

Always leave the bed in the low position when the patient is unattended. This could reduce the possibility of patient falls and severity of resultant injury. Failure to do so may cause injury.

WARNING:

When the bed height is changed, be sure that hands and personal belongings are away from the frame assemblies. Failure to do so may cause injury or equipment damage.

The Resident® LTC Bed has three adjustable sections, the head, knee, and foot (see the figures on page 8 and page 9). Adjustments can be made by use of the optional pendant or the optional control panels on the two head-end siderails of the electric drive bed.

Controls

Pendant Control

The optional pendant control gives electrical control of the head, knee, and hilow elevation.



Siderail Control Panels

NOTE:

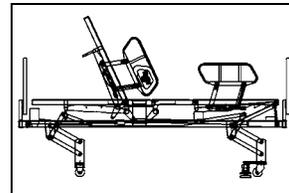
The control panels on your bed may look different, but their operation is the same.

The optional siderail control panels are on the two head-end siderails and permit electrical control of the head and knee sections and hilow elevation. The control panels can be installed toward the inside (for patient use) or the outside (for caregiver use) of the bed.



Head Section

The head section of the bed may be adjusted separately to get the applicable degree of slope up to its limit of approximately $65^{\circ} \pm 2^{\circ}$.



Raise or Lower the Head Section

Press the applicable **HEAD Up** or **HEAD Down** control on the optional pendant or siderail control panel.



Head Angle Indicator Mechanism

Some models have head angle indicators that mechanically show the angle of the head section from 0° to 70° with respect to the floor. The head angle indicators are installed on the head-end sides of the bed frame. The degree where the indicator ball rests identifies the head angle.



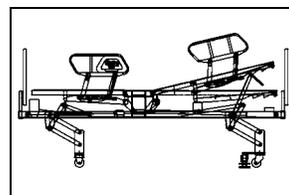
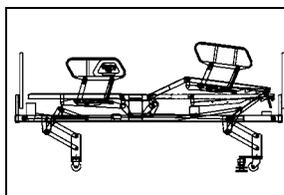
Head Angle Indicator Decals

Some models have head angle indicator decals that are installed on the head-end sides of the bed on the bed frame. The decals have marks for approximately every 15° of head section slope up to 60° .



Knee Section

The knee section of the bed may be separately adjusted to get the applicable degree of slope up to its limit of approximately $25^{\circ} \pm 2^{\circ}$.



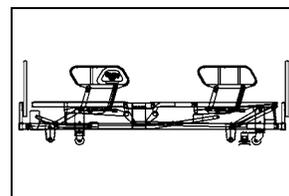
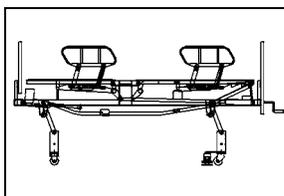
Raise or Lower the Knee Section

Press the applicable **KNEE Up** or **KNEE Down** control on the optional pendant or siderail control panel.



Hilow

The bed height may be adjusted to the applicable sleep height or entry/exit height.



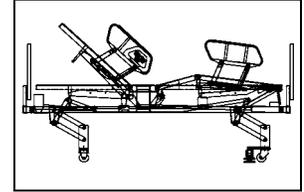
Raise or Lower the Bed

Press the applicable **HI/LO Up** or **HI/LO Down** control on the optional pendant or siderail control panel.



Automatic Contour

The automatic contour automatically lifts the knee section of the bed to approximately 15° as the head section is elevated from a flat position.



The automatic contour position can be temporarily disabled. To do this, press the **Head Up** and **Knee Down** controls at the same time.

The automatic contour functions as follows:

- With the bed in its flat position, press the **HEAD Up** control. The head and knee sections will elevate at the same time until the knee section reaches approximately 15°.
- If you continue to press the **HEAD Up** control, the head section will elevate until it reaches its maximum inclination, but the knee section will stop at approximately 15°.
- If you press the **HEAD Down** control while the head section is above 15°, only the head section will lower. When the head section lowers to approximately 15°, the knee section will start to lower also, and then both sections will continue to lower until they reach the flat position.

Lockout Panel

The lockout panel is on the foot end of the bed and permits the bed functions to be locked out.

- **Lock out a function**—turn the applicable function's lockout control (head up/down, knee up/down, automatic contour, and bed hilow) to the locked position. The lockout control's indicator will come on to show that the function is locked out.
- **Unlock a control**—turn the applicable function's lockout control to the unlocked position. The lockout control's indicator will go off to show that the function is not locked out.



Casters

Stationary casters are installed at the foot section of the bed. Swivel casters are installed at the head section of the bed.

Brakes

⚠ WARNING:

Set (lock) the brakes and leave the bed in the low position when the patient is unattended. Give the bed a pull to make sure the brakes are set. A patient could use the bed for support when they get on or off of the sleep surface. Failure to set the brakes may cause injury.



⚠ WARNING:

Brakes should always be set (locked) when the bed is occupied and especially when patients are to be transferred from a bed to other equipment (or from equipment to bed). Failure to do so may cause injury.

The brakes are on the two sides of the swivel caster frame assembly at the foot end of the bed. Some models have individually operated brakes where it is necessary that the pedals be pressed and released separately.

Lock a brake—press the brake pedal(s).

Unlock a brake—press the release arm next to the brake pedal.

Siderails

⚠ WARNING:

Evaluate patients for entrapment risk according to facility protocol, and monitor patients appropriately. Make sure all siderails are fully latched when in the raised position. Failure to do either of these could cause serious injury or death.



NOTE:

Siderails are intended to be a reminder to the patient of the unit's edges, not a patient-restraining device. When appropriate, Hill-Rom recommends that medical persons determine the correct methods necessary to make sure a patient remains safely in bed.

⚠ WARNING:

Always put siderails in the up position when a patient is unattended. Failure to do so may cause injury.

Siderails are on the two sides of the Resident® LTC electric drive bed at the head and foot sections. The siderails are raised and lowered independently of each other. When not in use, safely stow each siderail below the bed's sleep surface frame.

Raise a Siderail

1. Hold the siderail, and pull it out from its stowed position.
2. Move the siderail in the direction of the head if at head end of the bed, or in the direction of the foot if at the foot end of the bed. You will hear a click when the siderail latches into the locked position. To make sure the siderail is latched, give it a pull in the downward direction.

Lower a Siderail

1. Hold the siderail with one hand, and push in on the release latch with the other hand.
2. Move the siderail in the direction of the head if at head end of the bed, and in the direction of the foot if at the foot end of the bed.
3. Push the siderail into its stowed position below the sleep surface frame

Bumper

CAUTION:

Do not remove the bumper assembly. Failure to do so may cause equipment damage.

A bumper assembly is attached to the caster frame located at the head end of the bed.

Rod Sockets for IV

Four IV sockets are supplied. One at each outside corner of the bed.

Sleep Surface Frame

There are two sleep surface frame options available for use with the bed. The spring fabric frame is 36" x 80" (91 cm x 203 cm) and has 90 helical springs that sustain the fabric assembly. The hard pan sleep deck frame is 36" x 80" (91 cm x 203 cm). The outer surfaces of the panels are formed down to prevent sharp edges.

Mattress Stop

A mattress stop is installed on the foot end of the spring frame. In its highest upright position, the mattress stop keeps the mattress in position (away from the foot end of the bed).

Lift the mattress stop—lift upward until the notches in the bent legs of the stop engage the slots in the spring frame. Turn the stop in the direction of the foot end to lock it in the highest upright position.

Lower the mattress stop—turn the stop in the direction of the head end to disengage it from the slots in the spring frame, and then lower the stop downward.

Mattress Options

▲ **RELATIVE CONTRAINDICATION:**

Use of active therapy surfaces with patients with unstabilized spinal cord injury could cause serious injury to the patient.

▲ **CAUTION:**

The use of mattresses that are not sold by Hill-Rom, may reduce the effectiveness of the safety features and systems incorporated into Hill-Rom® beds.

The Resident® LTC Bed is compatible with the Comfortline® SE Prevention Mattress Series and any mattress that complies with these recommended dimensions:

Width	36" to 37" (91 cm to 94 cm)
Thickness	5" to 6" (13 cm to 15 cm)

Drainage Bag Hooks

Drainage bag hooks are on each side of the bed below the sleep surface frame near the seat section.

Headboard and Footboard

Remove—lift the head/footboard straight up until the mount plates on the head/footboard disengage the plates welded to the IV rod sockets.

Install—align the mount plates on the head/footboard with the metal plates on the IV rod sockets. Lower the head/footboard downward to engage.

Battery Backup (Optional)

A battery backup (auxiliary power supply) is available as an option. If a power failure occurs, the device permits operation of the bed. The auxiliary power supply will operate as much as 15 full cycles of the hilow and the head section when fully charged. This power supply charges through a 120 V AC, 60 Hz outlet and can be fully charged in 24 hours.

Clean and Disinfect

We recommend that you clean and disinfect the Resident® LTC Bed between patient use and regularly during extended patient stays. Refer to your facility's cleaning and disinfection policies, and follow the guidelines below.

WARNING:

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

SHOCK HAZARD:

The potential for electrical shock exists with electrical equipment. Failure to follow facility protocol could cause death or serious injury.

SHOCK HAZARD:

Before you clean the bed, unplug the bed from its power source and, if the bed has the optional battery backup, activate the lockouts to prevent accidental operation. Failure to do so may cause injury or equipment damage.

SHOCK HAZARD:

Do not expose the bed to excessive moisture. Injury or equipment damage could occur.

CAUTION:

Do not steam clean or power wash the bed or mattress. Pressure and excessive moisture can damage the mattress and the protective surfaces of the bed and its electrical components.

CAUTION:

Do not use harsh or abrasive cleansers, solvents, or scouring pads. Equipment damage could occur.

CAUTION:

Make sure the bed frame and mattress are dry before you put the mattress on the bed. Failure to do so could cause equipment damage.

Clean

1. Unplug the bed.
2. Remove all linens.
3. Use these to clean the bed:
 - A soft cloth soaked with warm water and a facility-approved general cleaning soap/detergent solution. Make sure the cloth is not so wet as to cause the cleaning solution to pool or flood on the mattress or other bed components.
 - A soft brush to remove stains and resistant soil. Do not use harsh or abrasive cleansers, solvents, or scouring pads.

4. Clean the bed. Give special attention to these areas:
 - Headboard—thoroughly clean as this is a high-touch area
 - Footboard
 - Siderails—thoroughly clean the high-touch areas (such as the upper and under sides of the siderail releases, pendants, and patient controls) and the latch areas and latch pins of the mount brackets
 - Bed frame
 - Casters
 - All other bed components
 - Fully-extended IV pole
 - Bed accessories that can be used again such as the mattress and patient helper

NOTE:

If you turn the mattress to clean it, make sure the cleaning solution does not pool or flow on to the other side or edges of the mattress. This may permit fluid to get into the mattress air outlets and zipper closures that ordinarily are protected by the ticking flaps.

5. Examine the condition of the mattress. If there are holes, tears, or other signs of damage or deterioration of the ticking, replace the mattress.
6. Disinfect the bed as described below.

Disinfect

Wipe down all surfaces with a facility-approved disinfectant, used in accordance with the manufacturer's instructions. Give special attention to high-touch areas such as the siderails, upper and under sides of siderail releases, pendants, patient controls, and headboards.

Wood Headboard and Footboard Care

Hill-Rom wood products are prepared with a resin-based sealer, which gives resistance to abrasion, stains, fluids, and fire.

Clean the head- and footboards with a soft cloth dampened with a suitable solution, followed by use of a dry cloth. Use diluted ammonia, detergent, and bleach solutions to clean the wood surfaces.

⚠ CAUTION:

Many disinfectant cleaners, if used in high concentrations, will soften a painted or sealed surface. Use of some disinfectant cleaners may damage equipment.

The Centers for Disease Control recommend EPA approved disinfectants, used at the manufacturer's suggested dilutions or bleach at 1:100 dilution (1/4 cup to 1 gallon water) to clean environmental surfaces.

Do not let a wet cloth lay on the wooden surfaces. Immediately wipe up any liquid spilled on the surface to prevent possible damage to the surface.

Apply a liquid furniture polish to the wood surfaces for surface protection.

Maintenance and Troubleshooting

⚠ WARNING:

Only authorized persons should service this bed. Service done by unauthorized persons could cause injury or equipment damage.

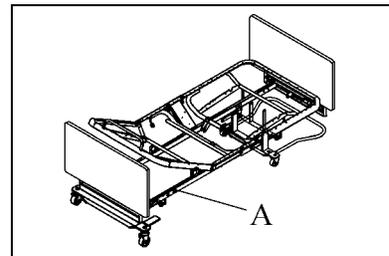
Replacement Parts

Use only Hill-Rom® parts and accessories. Do not make a modification to the bed without authorization from Hill-Rom.

Service Calls

When service is necessary, supply Hill-Rom with the serial number from the product identification label. This information can be found on the bed frame (A).

The Hill-Rom representative can identify your unit and supply the necessary aid more quickly when the serial number is supplied.



Specifications

Feature	Dimension
Sleep deck	36" x 80" (91 cm x 203 cm)
Bed weight (approximate)	275 lb (125 kg)
Deck height (high position)	30" (76 cm)
Deck height (low position)	13.9" (35.3 cm)
Siderail height above sleep surface frame	12.5" (31.8 cm)
Under bed clearance (minimum)	5" (13 cm)
Safe working load (includes patient, mattress, accessories and options)	400 lb (181 kg)
Overall width (siderails up)	42" (107 cm)
Overall width (siderails down)	39.25" (99.7 cm)
Overall length (high position)	95.25" (241.94 cm)
Length (bumpers in low position)	91.5" (232.4 cm)
Maximum head slope elevation	65° ± 2°
Maximum knee slope elevation	25° ± 2°

Product Symbols

Symbol	Description
 <p>Medical Electrical Equipment evaluated in accordance with ETL 118841, UL STD 2601-1, and CAM/CSA C22.2 No.601-1</p>	<p>ETL listed mark—conforms with ETL 118841 and UL STD 2601-1; also CAM/CSA C22.2 No.601-1</p>
<p>IPX 4</p>	<p>According to IEC 60529, rating for protection against fluid ingress and identified as equipment that is protected against unpressurized spraying and splashing water.</p>
	<p>Type B applied part according to IEC 60601-1 (UL 60601-1).</p>
	<p>According to IEC 61140, Class II equipment (double insulated)</p>
	<p>Manufacturer or distributor complies with the Waste Electric and Electronic Equipment Directive 2002/96/EC. (applicable to the controller, actuators, and the battery backup option)</p> <p>Recycle the item in accordance with local regulations.</p>
	<p>Do not step on.</p>
	<p>Keep hands away.</p>
	<p>Head Up/Down control—raises or lowers the head section of the bed.</p>
	<p>Knee Up/Down control—raises or lowers the knee section of the bed.</p>

Symbol	Description
	Bed Hilow control—raises or lowers the bed.

Electromagnetic Environment Guidance

Electromagnetic Emissions Guidance

Guidance and Manufacturer's Declaration—Electromagnetic Emissions		
The Resident® LTC Bed is intended for use in the electromagnetic environment specified below. The customer or the user of the Resident® LTC Bed should make sure it is used in such an environment.		
Emissions Test	Compliance	Electromagnetic Environment—Guidance
RF emissions CISPR 11	Group 1	The Resident® LTC Bed uses RF energy only for its internal functions. Therefore, its RF emissions are low and are not likely to cause any interference in nearby electronic equipment. (See Note 1.)
RF Emissions CISPR 11	Class B	The Resident® LTC Bed is suitable for use in all establishments other than domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class B	
Voltage Fluctuations/ Flicker Emissions IEC 61000-3-3	Complies	

Electromagnetic Immunity Guidance

Guidance and Manufacturer's Declaration - Electromagnetic Immunity			
The Resident® LTC Bed is intended for use in the electromagnetic environment specified below. The customer or the user of the Resident® LTC Bed should make sure it is used in such an environment.			
Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment—Guidance
Electrostatic Discharge (ESD) IEC 61000-4-2	± 6 kV Contact ± 8 kV Air	± 6 kV Contact ± 8 kV Air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical Fast Transient/Burst IEC 61000-4-4	± 2 kV for Power Supply Lines ± 1 kV for Input/ Output Lines	± 2 kV for Power Supply Lines ± 1 kV for Input/ Output Lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV Line(s) to Line(s) ± 2 kV Line(s) to Earth	± 1 kV Line(s) to Line(s) ± 2 kV Line(s) to Earth	Mains power quality should be that of a typical commercial or hospital environment.

Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The Resident® LTC Bed is intended for use in the electromagnetic environment specified below. The customer or the user of the Resident® LTC Bed should make sure it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment—Guidance
Voltage Dips, Short Interruptions, and Variations on Power Supply Lines IEC 61000-4-11	< 5% U_T (> 95% dip in U_T) for 0.5 cycles 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles < 5% U_T (>95% dip in U_T) for 5 seconds (See Note 1)	< 5% U_T (> 95% dip in U_T) for 0.5 cycles < 40% U_T (60% dip in U_T) for 5 cycles 70% U_T (30% dip in U_T) for 25 cycles < 5% U_T (> 95% dip in U_T) for 5 seconds	Mains power quality should be of a typical commercial or hospital environment. If the user of the Resident® LTC Bed requires continued operation during power mains interruption, it is recommended that the Resident® LTC Bed be powered from an uninterruptible power supply or a battery.
Power Frequency (50/60Hz) Magnetic Fields IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

Note 1: U_T is the AC mains voltage prior to application of the test level.

Electromagnetic Immunity Guidance

Guidance and Manufacturer's Declaration - Electromagnetic Immunity			
The Resident® LTC Bed is intended for use in the electromagnetic environment specified below. The customer or the user of the Resident® LTC Bed should make sure it is used in such an environment.			
Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment—Guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 V	<p>Portable and mobile RF communications equipment should be used no closer to any part of the Resident® LTC Bed, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.</p> <p>Recommended separation distance</p> $d = 1.2 \sqrt{P}$
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	$d = 1.2 \sqrt{P}$ 80 MHz to 800 MHz $d = 2.33 \sqrt{P}$ 800 MHz to 2.5 GHz <p>Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation in metres (m).</p> <p>Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey^a, should be less than the compliance level in each frequency range^b.</p> <p>Interference may occur in the vicinity of equipment marked with the following symbol.</p> 
<p>Note 1: At 80 MHz and 800 MHz, the higher the frequency range applies.</p> <p>Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.</p>			

- a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Resident® LTC Bed is used exceeds the applicable RF compliance level above, the Resident® LTC Bed should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the Resident® LTC Bed.
- b. Over the frequency range of 150 kHz to 80 MHz, field strength should be less than 3 V/m.

Recommended Separation Distances between Portable and Mobile RF Communications Equipment and the Resident® LTC Bed

The Resident® LTC Bed is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Resident® LTC Bed can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Resident® LTC Bed as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter, W	Separation distance according to frequency of transmitter, m		
	150 kHz to 80 MHz $d = 1.2\sqrt{P}$	80 MHz to 800 MHz $d = 1.2\sqrt{P}$	800 MHz to 2.5 GHz $d = 2.33\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance **d** in metres (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTE 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

NOTE 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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