Spirit 3300 Series Dental Chair Use and Care
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### Technical Support

Technical assistance is available Monday through Friday, 8:00 am to 8:00 pm (Eastern Standard Time).

Phone: 800-659-5922
Fax: 800-659-7255
Customer Service: 800-659-6560
OVERVIEW

- Quick Release Articulating Headrest
- Chair Back
- Articulating Armrest
- Chair Seat & Toeboard with Scuff Cover
- Dual Integrated Touch Pad
- Pump Cover
- Optional Foot Switch
GENERAL INFORMATION

Definition of Symbols
The following symbols and terms may be used throughout this manual and your equipment:

**WARNING:** Failure to carefully follow the described procedure may result in damage to the equipment and/or injury to the patient/operator.

Risk of electrical shock present. Make sure power is disconnected before attempting this procedure.

See operating instructions.

(AC) Alternating current.

Protective earth (Ground)

Manufacturing Date

Manufacturing Place

Waste Electrical and Electronic Equipment.

Type B Applied part.


Conforms with the Essential Requirements of the European Medical Device Directive 93/42/EEC for Class IIa Devices.

Indicates conformity to General Requirements for Safety is certified by Intertek Testing Services.

General mandatory action required, important to follow instruction. Not a caution.

Warning, strong magnetic field.

Off

On

Light Switch

European Authorized Representative

USB Port

Authorized Representative: Kaltenbach & Voigt GmbH
Bismarckring 39
88400 Biberach
Germany

PRODUCT DISPOSAL
Contact your local authorized dealer for proper disposal of the device to ensure compliance with your local environmental regulations.

INTERFERENCE WITH ELECTROMEDICAL DEVICES
To guarantee the operational safety of electromedical devices, it is recommended that the operation of mobile radio telephones in the medical practice or hospital be prohibited.

Strong EMI sources such as electro surgery units or x-ray units may affect performance. If performance problems occur, move the unit to another electrical circuit or physical location.

INCOMPATIBLE UNITS OR ACCESSORIES
To guarantee the operational safety and function of this device, the use of unapproved units or accessories is not advised. Doing so could result in potential hazard. Using accessory equipment not complying with the equivalent safety requirements of this equipment may lead to a reduced level of safety of the resulting system. Connecting electrical equipment to multiple socket outlets effectively leads to creating an ME SYSTEM, and can result in a reduced level of safety. All configurations shall comply with the system standard IEC 60601-1-1 or IEC 60601-1:2005

OBTAINING TECHNICAL LITERATURE
The manufacturer will make available on request circuit diagrams, component parts lists, descriptions, calibration instructions or other information that will assist technical personnel to repair and replace serviceable items.

**Storage and Transport**
Temperature -68°F to 122°F (-55°C to +50°C)
Relative humidity 10% to 90%

**Working environment**
Ambient temperature 68°F to 76°F (20°C to +25°C)
Relative humidity 20% to 60% non-condensing
Atmospheric pressure: 13.1 to 15.3 PSI

**WARNING:** Use only original replacement parts. All repairs should be performed by an authorized dealer and/or their representatives.

**WARNING:** This product is intended for use by trained dental/medical professionals only.

Electrical Specifications

<table>
<thead>
<tr>
<th>Volts</th>
<th>Cycles</th>
<th>Amps</th>
<th>Speed</th>
<th>Braking Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>115 VAC</td>
<td>60 HZ</td>
<td>8 A</td>
<td>~</td>
<td></td>
</tr>
<tr>
<td>230 VAC</td>
<td>50 HZ</td>
<td>4 A</td>
<td>~</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FUSE IDENTITY</th>
<th>VOLTAGE (VAC)</th>
<th>AMPS</th>
<th>SPEED</th>
<th>BRAKING CAPACITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1, F2</td>
<td>250</td>
<td>12</td>
<td>FAST ACTING</td>
<td>750@250V</td>
</tr>
<tr>
<td>F1*, F2*</td>
<td>250</td>
<td>6</td>
<td>FAST ACTING</td>
<td>750@250V</td>
</tr>
</tbody>
</table>

F1*, F2* FOR 230VAC CHAIR

IEC Medical Device Classification

Classification: I
Type: B
Operation Mode: Intermittent - 5% Duty Cycle
0.5 min. ON
9.5 min OFF
### SAFETY INFORMATION

Review the following safety precautions to avoid injury and prevent damage to this equipment. Use this product only as specified.

<table>
<thead>
<tr>
<th>WARNING: A dental chair may include magnets in the construction of the device which may temporarily affect the function/programming of some implantable pacemakers or defibrillators. If the implanted device is programmed to respond to a magnet, people who have these types of devices should avoid dental chairs with magnets.</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARNING: This product is designed for use in an indoor temperature controlled office environment.</td>
</tr>
<tr>
<td>WARNING: No modification of this equipment is allowed.</td>
</tr>
<tr>
<td>WARNING: To avoid risk of electric shock, this equipment must be connected only to supply mains with protective earth.</td>
</tr>
<tr>
<td>WARNING: Use a licensed electrician for all wiring.</td>
</tr>
<tr>
<td>WARNING: Power cords and their associated parts cannot be substituted without increased risk of electric shock or fire. We recommend the use of original equipment replacement parts only! Power cords must be installed by qualified personnel. Make sure all service loops, strain reliefs, and cord guards are in place and that line, neutral and ground wires are secured.</td>
</tr>
<tr>
<td>WARNING: This product must be disinfected before use.</td>
</tr>
<tr>
<td>WARNING: Locate and position chair so that it can be easily unplugged.</td>
</tr>
<tr>
<td>This equipment is not for use in rooms where and explosion hazard exists</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WARNING: Failure to disinfect equipment between patients could expose user/patient to cross contamination and bio-burden/bio-contamination.</th>
</tr>
</thead>
<tbody>
<tr>
<td>WARNING: Maximum load rating for this chair is 450 lbs. To avoid personal injury and/or damage to the chair, do not exceed this limit.</td>
</tr>
<tr>
<td>WARNING: To avoid possible injury and/or damage to the chair, do not apply full body weight on the headrest, backrest, toeboard and armrest. Doing so may cause the chair to tip.</td>
</tr>
<tr>
<td>WARNING: Support the patient’s head and neck when adjusting the headrest. Failure to do so may result in injury to the patient.</td>
</tr>
<tr>
<td>WARNING: Use caution when using arm rests for leverage when exiting the chair, as arms may rotate and cause patient to fall or get injured.</td>
</tr>
<tr>
<td>WARNING: Do not operate chair when any cover is removed. Doing so may result in injury to the operator.</td>
</tr>
<tr>
<td>WARNING: Do not place knees or legs under chair arm support when chair is being lowered.</td>
</tr>
<tr>
<td>WARNING: To avoid injury, discontinue use of chair and have serviced by authorized dealer if oil is seen leaking from chair hydraulic system.</td>
</tr>
<tr>
<td>WARNING: Use caution when filling the hydraulic reservoir to avoid overflow and spillage.</td>
</tr>
<tr>
<td>WARNING: Only authorized service technicians should attempt to install or service this equipment. Use of other than authorized technicians will void the warranty.</td>
</tr>
</tbody>
</table>

As manufacturers of electro-medical products we can assume responsibility for safety-related performance of the equipment only if maintenance, repair and modifications are carried out only by us or agencies we have authorized for this purpose, and if components affecting safe operation of the chair that may be needed are replaced with original parts.

We suggest that you request a certificate showing the nature and extent of the work performed, from those who carry out such work, and specify that the certificate show any changes in rated parameters or working ranges, as well as the date, the name of the firm and a signature.
REGULATORY INFORMATION

Technical Description

The dental chair is used to position the patient so that the oral cavity is in the desired position for the dentist to perform various dental procedures and is hydraulically operated. There are two dynamic functions: the base (up/down) and the back (incline/recline). These functions are activated by use of either a footswitch or a hand-operated touch pad.

The dental chair has the provision to mount additional dental equipment, including over-the-patient delivery systems. For this purpose, the chair must provide a stable foundation for both the patient and the additional equipment.

Power to the chair is either 115 or 230 VAC. The power is delivered to a microprocessor controlled printed circuit board. Software in the microprocessor controls the movement of the chair. The dentist can program some chair models to preset positions.

The dental chair is classified as a Class I device per FDA CFR 21, Health Canada, and under rule 1 of Annex IX of the MDD 93/42/EEC.

Product Identification

This dental chair can be identified by its product label, located underneath the chair seat. This label states the chair model, serial number, electrical specifications, manufacture date and safety classification. Note the SAMPLE labels shown below.
Plug the power cord for the chair into a suitable power receptacle. See the Electrical Specification and Product Identification Label for power requirements. To remove power from the chair, unplug the power cable. It is important that the chair is positioned and located so that it can be unplugged easily.

**Dual Intergrated Touch Pads**

Dual touch pads are located on the arm supports and are oriented so the practitioner can easily read the button functions without moving out of position. The touch pad can program up to 4 preset chair positions. Also, the user can operate the dental light and the chair swivel lock by depressing the corresponding buttons from the touch pad.

**Secure Touch Feature on Dual Touchpads**

Each dual touchpad located on the arms is equipped with a Secure Touch feature which prevents accidental button activation or chair movement. The Secure Touch button must first be pressed before any other buttons are activated except for swivel break lock. To use the dual touchpad, simply press Secure Touch first and then immediately press the next desired key(s) for chair movement.

NOTE: If chair has been left idle for 7 seconds, activate the dual touchpads again by pressing the Secure Touch button.

**Chair Control and One Touch Programming**

The chair can be controlled by the dual integrated touch pads located on the arm supports or by the optional foot control or other units. Chair positions are factory set with pre-programmed positions which can be accessed by using the Auto Buttons on either touch pad.

This chair also features a one-touch programming function which allows the Auto buttons to be easily changed to a new pre-programmed position. Programmed positions set on one touchpad are available on the other touchpads.

**WARNING:** When lowering chair, ensure adequate distances between legs, chair and equipment to prevent possible injury.
OPERATION

To Operate Auto Buttons
After pressing Secure Touch Button once, press the desired auto button once. Chair should automatically move to the pre-programmed position.

Typical Preset Positions

<table>
<thead>
<tr>
<th>POSITION 0: Entry/Exit</th>
<th>POSITION 1: Primary Operating Position</th>
<th>POSITION 2: Secondary Operating Position</th>
<th>POSITION 3: X-Ray or Rinse Position</th>
</tr>
</thead>
</table>

Reprogramming Auto Buttons from Chair

1. Press and release Secure Touch button on the chair to activate the touchpad.
2. Adjust the chair to the desired position using the manual movement buttons as necessary.
3. While touchpad is still in active mode press and hold the desired Auto Button to be programmed (0, 1, 2 or 3) for a few seconds. Chair will beep to confirm the position has been set.
4. Repeat procedure to program the other Auto Buttons if desired.

Chair Swivel Lock Release

The chair rotates a total of +/- 30° at 10° detent intervals. To rotate the chair, press and hold the chair swivel unlock button to release the brake mechanism. Once the chair is rotated to the new desired position, release the button and guide chair into the new detent position.
**NOTE:** Chair control devices operate the same programmed positions. Changing a position on one device will change the position for all devices.

### Reprogramming Auto Buttons 0 or 1

1. Using the manual buttons, adjust the chair to the desired position.

2. Press and hold the LEARN button, the chair will beep once to confirm. While holding the LEARN button, press the desired auto button ("0" or "1") TWO TIMES and listen for one quick beep to confirm the position has been set.

3. To program the second auto button repeat the procedure.
Articulating Headrest

The articulating headrest can be adjusted by pressing and holding the Quick Release Button and positioning the headrest into the desired position. Release the button to lock headrest into place.

**WARNING:** Support the patient's head when adjusting the headrest. Failure to do so may result in injury to the patient.
OPERATION

Armrest

The armrest is designed to slide out of the way for easier patient entry and exit. To slide armrest back for entry of exit, lift and slide the armrest release trigger and slide the armrest until it reaches the back position. To return the armrest to the normal position, slide the arm forward until it locks into place.

![Armrest Release Trigger]

**WARNING:** Use caution when using the armrest for leverage while entering or exiting the chair. Risk of injury to the patient could occur.

Lower Truss Cover Stop Feature

This is a dual switch stop feature located on lower truss cover that will stop all downward movement of the chair base if triggered.

![Lower Truss Cover]

**WARNING:** Do not place anything under the chair base cover while the chair is operating, as it could result in injury.
**OPERATION**

**ErgoSoothe™ Massage Option**

ErgoSoothe™ Massage bladders are located in the backrest cushions. These bladders are air driven and will fluctuate as the massage takes place.

To activate the full massage feature, flip both switches up to the “ON” position. Flip both switches down to the “OFF” position to deactivate the entire massage.

If only the shoulder area is to be massaged, flip the shoulder switch to “ON” and keep the lumbar switch in the “OFF” position (or vice versa to only activate the lumbar massage).

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**WARNING:**

ErgoSoothe MUST BE SUPPLIED WITH A 1/4” OD, 80-100 PSI AIR SUPPLY LINE. THE PRESSURE REGULATOR IS PRE-SET AND CAN NOT BE ADJUSTED. IF THE RELIEF VALVES BEGIN VENTING, TURN OFF THE CONTROL SWITCHES AND CONTACT PELTON & CRANE AUTHORIZED SERVICE TECHNICIAN FOR REPAIR.
Optional Air / Water Outlets

The optional air / water outlets are conveniently located underneath the seat and are attached to the seat rail. These outlets can accommodate extra auxiliary equipment that is within the user's reach.

The water outlet accepts 1/4 in. Quick Disconnect fitting and has an integral shut-off valve. Next to the water outlet is a control valve to adjust flow from the water outlet.

The air outlet accepts a 3/8 in. Quick Disconnect fitting and has an integral shut-off valve.
CLEANING, DISINFECTING, & STERILIZATION

Barrier Technique
Pelton & Crane recommends the use of disposable barriers on all controls that may be contacted by dental practitioners during a dental procedure. The use of disposable barriers helps preserve the finish and appearance of the equipment in addition to infection control. Pelton & Crane recommends the use of an FDA market-cleared barrier (example: Pinnacle Cover-all™). Follow barrier manufacturer instructions for proper use of products.

Chemical Disinfection
In addition to the use of barriers, Pelton & Crane recommends the use of an EP registered and FDA market-cleared chemical disinfectant (example: Cavicide™) to be used on all surfaces that may come in contact with dental instruments during dental procedures. Follow chemical disinfectant manufacturer instructions for proper use of products.

Cleaning and Disinfecting Assistance
For assistance with cleaning and disinfecting, contact the Pelton & Crane Technical Service Department at 1-800-659-5922.

Additional information is available from the organizations listed below:
• Organization for Safety and Asepsis Procedures: www.osap.org
• American Dental Association: www.ada.org
• Department of Health and Human Resources Centers for Disease Control and Prevention (CDC): www.cdc.gov
• European Dental Association: www.eda-eu.org

General Purpose Cleaning
For general purpose cleaning, Pelton & Crane recommends one of two methods:
1) Use a mild detergent and warm water
2) Use a 10% solution of bleach with water

Even with the use of chemical disinfectants, it is recommended that the equipment be thoroughly washed with soap and warm water at least once per day. This washdown will minimize the harmful effects of the disinfectant residues that can accumulate on the equipment.

Dental Handpiece, Instruments and Accessories
Please refer to respective manufacturer’s Instructions for Use (IFU) for appropriate cleaning, disinfecting and sterilization requirements. These include, but are not limited to, pneumatic handpieces, electric motors with handpieces, scalers, intra-oral cameras, curing lights, air/water syringes, SE and HVE vacuum instruments.

WARNING *The Manufacturer makes no representation as to the disinfectant efficacy of these products. We make no warranty expressed or implied that these disinfectants will not damage the surface finishes. Damage or discoloration of the surface finishes are not covered under the warranty.

**Iodophor-based disinfectants will cause yellow staining on many surfaces.
Cleaning Dental Chair Upholstery

NOTE: With all cleaning products, first clean a small, inconspicuous area to ensure the material will not discolor or fade. It is recommended that each stain be cleaned in a step-by-step manner using the sequence below:

1. Regular Cleaning
   Use a Solution of 10% household liquid dish soap with warm water applied with a soft damp cloth. Rinse area with clean water and wipe dry. Cleaning frequency depends upon use. It is recommended that upholstery be cleaned between patients.

2. Stubborn Stains
   Use detergent cleaners such as Formula 409 ® or Fantastik ®. Wipe using a soft cloth or plastic soft bristle brush. Rinse with clean water and wipe dry.

3. More Difficult Stains
   Carefully clean the stained area with lighter fluid (naphtha) or rubbing alcohol. Apply using a soft, white cloth and rub gently. Rinse with clean water and wipe dry.

4. Ultra Leather Upholstery
   Clean spots with mild soap and water or an ordinary household cleaner such as Fantastik ® or Formula 409 ®. Wipe off any residue using a clean, damp cloth. Air dry or dry quickly with the warm setting on a hair dryer.

   Disinfect ultra leather upholstery with a 9:1 water:bleach solution.

Other Tips

Always apply cleaners with a soft white cloth. Avoid the use of paper towels.

When using strong cleaning solutions (such as alcohol), it is advisable to first test in an inconspicuous area.

Never use harsh solvents or cleaners that are intended for industrial use.
MEDICAL ELECTRICAL EQUIPMENT ELECTROMAGNETIC COMPATIBILITY
INSTRUCTIONS FOR USE

ELECTROMAGNETIC COMPATIBILITY
Electrical medical devices are subject to special EMC safety measurements and as a result the equipment must be properly installed according to the Pelton and Crane installation instruction manual.

PORTABLE ELECTRONIC DEVICES
Portable and mobile high frequency electronic communications equipment may interfere with electronic medical devices.

STATIC SENSITIVE DEVICES
Where labeled this equipment contains static sensitive devices that require special precautions when handling. At a minimum, a grounded wrist strap that is connected to a ground stud should be worn to reduce the possibility of damage to the chair.

MEDICAL ELECTRICAL EQUIPMENT ELECTROMAGNETIC COMPATIBILITY
TECHNICAL DESCRIPTION

ELECTROMAGNETIC COMPATIBILITY
This equipment has been tested and found to comply with the requirements for medical devices of IEC 60601-1-2 and is intended to be installed in a typical medical environment.

ACCESSORY USE
Using accessory devices not specified by Pelton and Crane for use with their equipment may results in an increase of electromagnetic emissions and/or a decrease in electromagnetic immunity of the system.

INTERFERENCE FROM OTHER EQUIPMENT
If other equipment is used adjacent to or stacked with the Pelton and Crane equipment the system must be observed to verify normal operation.
Guidance and manufacturer’s declaration-electromagnetic emissions

The Model SP30 is intended for use in the electromagnetic environment specified below. The customer or the user of the SP30 should assure that it is used in such an environment.

<table>
<thead>
<tr>
<th>Emissions Test</th>
<th>Compliance</th>
<th>Electromagnetic Environment Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF emissions</td>
<td>Group 1</td>
<td>The SP30 chairs use RF energy only for its internal function. Therefore, their emissions are very low and are not likely to cause any interference in nearby electronic equipment.</td>
</tr>
<tr>
<td>CISPR-11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harmonic Emissions</td>
<td>Class A</td>
<td>The SP30 chairs are 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.</td>
</tr>
<tr>
<td>IEC 61000-3-2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage Fluctuations/ Flicker Emissions</td>
<td>Complies</td>
<td></td>
</tr>
<tr>
<td>IEC 61000-3-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recommended separation distances between portable and mobile RF communications equipment and the unit

The Model SP30 is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the SP30 can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the SP30 as recommended below, according to the maximum output of the communications equipment.

<table>
<thead>
<tr>
<th>Rated maximum output power of transmitter W</th>
<th>Separation distance according to frequency of transmitter m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>150 kHz to 80 MHz d= 1.2√P</td>
</tr>
<tr>
<td>0.01</td>
<td>0.12</td>
</tr>
<tr>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>10</td>
<td>3.8</td>
</tr>
<tr>
<td>100</td>
<td>12</td>
</tr>
</tbody>
</table>

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (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 to 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.
## Guidance and manufacturer’s declaration—electromagnetic immunity

The Model SP30 Dental Chairs are intended for use in the electromagnetic environment specified below. The customer or the user of the SP30 should assure that it is used in such an environment.

<table>
<thead>
<tr>
<th>Immunity Test</th>
<th>IEC60601 Test Level</th>
<th>Compliance Level</th>
<th>Electromagnetic Environment Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrostatic Discharge (ESD) IEC</td>
<td>+/-6 kV contact</td>
<td>+/-6 kV contact</td>
<td>Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material the relative humidity should be at least 30% Where labeled, a ground strap (connected to ground lug) should be worn to reduce the possibility of damage to the unit when servicing.</td>
</tr>
<tr>
<td>61000-4-2</td>
<td>+/-8 kV air</td>
<td>+/-8 kV air</td>
<td></td>
</tr>
<tr>
<td>Electrical Fast Transient/Burst IEC</td>
<td>+/-2 kV for power supply lines</td>
<td>+/-2 kV for power supply lines</td>
<td>Mains power quality should be that of typical commercial or hospital environment.</td>
</tr>
<tr>
<td>61000-4-4</td>
<td>+1-1 kV for input output lines</td>
<td>Not applicable, No I/O lines</td>
<td></td>
</tr>
<tr>
<td>Surge IEC61000-4-5</td>
<td>+/-1 kV differential mode</td>
<td>+/-1 kV differential mode</td>
<td>Mains power quality should be that of typical commercial or hospital environment.</td>
</tr>
<tr>
<td></td>
<td>+/-2 kV common mode</td>
<td>+/-2 kV common mode</td>
<td></td>
</tr>
<tr>
<td>Voltage Dips, Short Intermittent and Voltage Variations on Power Supply Input Lines IEC 61000-4-11</td>
<td>&lt;5% $U_r$ (&gt;95% dip in $U_r$) for 0.5 cycle</td>
<td>&lt;5% $U_r$ (&gt;95% dip in $U_r$) for 0.5 cycle</td>
<td>Mains power quality should be that of typical commercial or hospital environment. If the user of the SP30 requires continued operation during power mains interruptions, it is recommended that the SP30 be powered by an uninterrupted power supply or battery.</td>
</tr>
<tr>
<td></td>
<td>40% $U_r$ (60% dip in $U_r$) for 5 cycles</td>
<td>40% $U_r$ (60% dip in $U_r$) for 5 cycles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70% $U_r$ (30% dip in $U_r$) for 25 cycles</td>
<td>70% $U_r$ (30% dip in $U_r$) for 25 cycles</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;5% $U_r$ (&gt;95% dip in $U_r$) for 5 seconds</td>
<td>&lt;5% $U_r$ (&gt;95% dip in $U_r$) for 5 seconds</td>
<td></td>
</tr>
<tr>
<td>Power Frequency (50/60 Hz) Magnetic Field IEC 61000-4-8</td>
<td>3 A/m</td>
<td>3 A/m</td>
<td>Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.</td>
</tr>
</tbody>
</table>

$U_r$ is the AC. mains voltage prior to application of the test level.