

**stryker**<sup>®</sup>

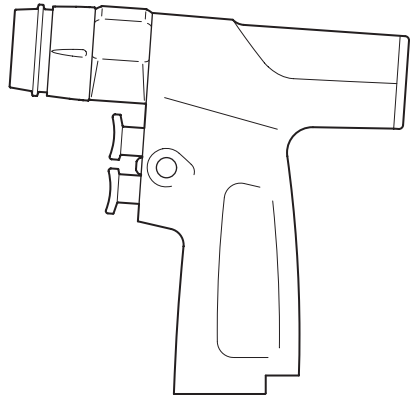
# System 7 Dual Trigger Rotary Handpiece

**REF** 7205-000-000

**Instructions For Use**

**R<sub>x</sub> ONLY**

**CE** 0197



ENGLISH (EN)

## Introduction

This *Instructions For Use* manual is the most comprehensive source of information for the safe and effective use of your product. This manual may be used by in-service trainers, physicians, nurses, surgical technologists, and biomedical equipment technicians. Keep and consult this reference manual during the life of the product.

The following conventions are used in this manual:

- A **WARNING** highlights a safety-related issue. ALWAYS comply with this information to prevent patient and/or healthcare staff injury.
- A **CAUTION** highlights a product reliability issue. ALWAYS comply with this information to prevent product damage.
- A **NOTE** supplements and/or clarifies procedural information.

If additional information or in-service training is required, contact your Stryker sales representative or call Stryker customer service. Outside the US, contact your nearest Stryker subsidiary.

## Indications For Use

The Stryker System 7 Battery Powered Heavy Duty System is intended for use in the cutting, drilling, decorticating, and smoothing of bone and other bone related tissue in a variety of surgical procedures. It is also usable in the placement of screws, wires, pins, and other fixation devices.

**NOTE:** The Stryker System 7 Dual Trigger Rotary Handpiece (handpiece) is a component of the Stryker System 7 Battery Powered Heavy Duty System.

## Contraindications

None known.

## User/Patient Safety



### WARNINGS:

- Before using any system component, or any component compatible with this system, read and understand the instructions. Pay particular attention to WARNING information. Become familiar with the system components prior to use.
- Only trained and experienced healthcare professionals should use this equipment.
- The healthcare professional performing any procedure is responsible for determining the appropriateness of this equipment and the specific technique used for each patient. Stryker, as a manufacturer, does not recommend surgical procedure or technique.
- Upon initial receipt and before each use, clean and sterilize the equipment as indicated. See the *Heavy Duty Care Instructions* manual for processing instructions.

- Upon initial receipt and before each use, operate the equipment and inspect each component for damage. DO NOT use any equipment if damage is apparent. See the *Heavy Duty Care Instructions* manual for inspection criteria.
  - DO NOT use this equipment in areas in which flammable anesthetics or flammable agents are mixed with air, oxygen, or nitrous oxide.
  - Take special precautions regarding electromagnetic compatibility (EMC) when using medical electrical equipment. Place this equipment into service according to the EMC information contained in this manual. Portable and mobile radio frequency (RF) equipment can affect the function of this equipment.
  - DO NOT stack or place equipment adjacent to the product. If such a configuration is necessary, observe the configuration to ensure that electromagnetic interference does not degrade performance.
  - DO NOT use the product in a magnetic resonance imaging (MRI) environment. Using the product in an MRI environment could affect the function of the system.
  - Using other electronic components and accessories may result in increased electromagnetic emissions or decreased electromagnetic immunity of the system.
  - DO NOT reuse, reprocess, or repack a device that is intended for single use only.
    - A single use device may not withstand chemical, chemical vapor, or high temperature sterilization reprocessing.
    - Design features may make cleaning difficult.
    - Reuse may create a contamination risk and compromise structural integrity resulting in operational failure.
    - Critical product information may be lost during repackaging.
- Failure to comply may lead to infection or cross infection and result in patient and/or healthcare staff injury.

**NOTES:**

- A variety of attachments are available for use with this handpiece. Each attachment has a specialized retainer for wires, pins, tools and/or cutting accessories. See the *Heavy Duty Rotary Handpiece Attachments Instructions For Use* manual for specific attachment and accessory instructions.
- For a complete list of accessories, contact your Stryker sales representative. Outside the US, contact your nearest Stryker subsidiary.

## Accessories

**WARNINGS:**

- Use only Stryker-approved system components and accessories, unless otherwise specified. DO NOT modify any system component or accessory.

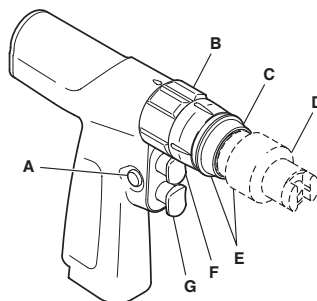
## Accessories (continued)

The following Stryker-approved accessories are sold separately:

DESCRIPTION	REF
Rotary Handpiece Attachments	6203-XXX-XXX series
	7203-XXX-XXX series
System 6 Battery Pack, Small	6212-000-000
System 6 Battery Pack, Large	6215-000-000
System 6 Aseptic Battery Kit, Large	6126-000-000
System 6 Aseptic Battery Kit, Small	6127-000-000
Stryker SmartLife™ Battery Pack, Small	7212-000-000
Stryker SmartLife Battery Pack, Large	7215-000-000
Stryker SmartLife Non-sterile Battery, Large	7126-110-000
Stryker SmartLife Aseptic Housing, Large	7126-120-000
Stryker SmartLife Transfer Shield, Large	7126-130-000
Stryker SmartLife Non-sterile Battery, Small	7222-110-000
Stryker SmartLife Aseptic Housing, Small	7222-120-000
Stryker SmartLife Transfer Shield, Small	7222-130-000

## Features

### Handpiece



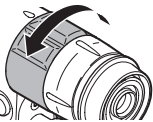
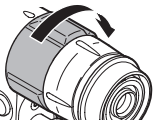
<b>A</b>	<b>Function Switch</b> – Locks one or both of the triggers.
<b>B</b>	<b>Shift Collar</b> – Sets the speed and torque.
<b>C</b>	<b>Attachment Collar</b> – Retains the attachment in the handpiece.
<b>D</b>	<b>Attachment</b> – A variety of attachments are available for use with this handpiece. Each attachment has a specialized retainer for wires, pins, tools and/or cutting accessories.

## Handpiece (continued)



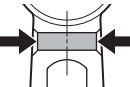
E	<b>Applied Part</b> – The distal end of the handpiece and the attachment (as defined by the standards listed in the <i>Specifications</i> section under <i>Product Safety Certification</i> ).
F	<b>Reverse Trigger</b> – Controls the variable speed operation of the handpiece in a counterclockwise direction.
G	<b>Forward Trigger</b> – Controls the variable speed operation of the handpiece in a clockwise direction.

**NOTE:** Press both triggers simultaneously to operate the handpiece in oscillate mode.

## Shift Collar









	<b>Drill Mode</b> – Fast speed, low torque operation
	<b>Ream Mode</b> – Slow speed, high torque operation

## Function Switch

	<b>Forward Mode</b> – Only the forward trigger is functional. The reverse trigger is locked to prevent inadvertent operation of the handpiece in a counterclockwise direction.
	<b>Forward/Reverse/Oscillate Mode</b> – Both triggers are functional.
	<b>Safe Mode</b> – Both triggers are locked to prevent inadvertent operation of the handpiece.

## Definitions

The symbols located on the equipment and/or labeling are defined in this section or in the *Symbol Definition Chart*. See the *Symbol Definition Chart* supplied with the equipment.

SYMBOL	DEFINITION
	<b>Forward Trigger or Reverse Trigger</b> – (conditional symbol; action is in the direction of the arrow)
	<b>Forward Trigger or Reverse Trigger</b> – (conditional symbol; action is in the direction of the arrow)
<b>DRILL</b> 	<b>Drill Mode</b>
<b>REAM</b> 	<b>Ream Mode</b>
F/R 1 min / 4 min x 3 OSC 15s/15s x 5	<b>Duty Cycle</b> – See the <i>Specifications</i> section.
	General warning sign
 	To comply with European Community Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/ EU, ALWAYS collect this product separately for recycling. DO NOT dispose of this product as unsorted municipal waste. Contact your local distributor for disposal information.
	Direct current

## Instructions

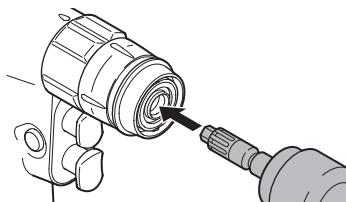
### To Install the Attachment and Accessory



**WARNING:** ALWAYS slide the function switch to the safe mode position before installing the attachment or accessory.

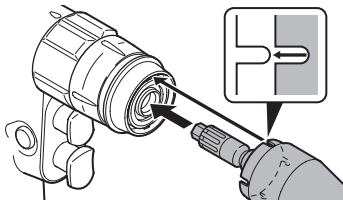
**NOTE:** See the *Heavy Duty Rotary Handpiece Attachments Instructions For Use* manual for specific attachment and accessory instructions.

1. Insert the attachment into the handpiece until the attachment snaps into place.



## To Install the Attachment and Accessory (continued)

**NOTE:** If the attachment has notches, align one of the notches with a tab under the attachment collar before insertion.



2. Gently tug the attachment to make sure the attachment is securely locked in the handpiece.
3. Install a wire, pin, tool, or cutting accessory as required.

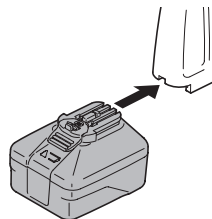
## To Install the Battery Pack



**WARNING:** ALWAYS slide the function switch to the safe mode position before installing the battery pack.

**NOTE:** See the instructions for use supplied with the battery pack and/or battery charger for charging instructions and specifications.

1. Slide a fully charged battery pack into the handpiece until the battery pack snaps into place.



2. Gently tug the battery pack to make sure the battery pack is securely locked in the handpiece.
3. Test the operation of the handpiece by sliding the function switch to the forward or forward/reverse/oscillate mode position, and then depressing the trigger.

## To Operate the Handpiece



### WARNINGS:

- ALWAYS slide the function switch to the safe mode position when the handpiece is idle or when passing the handpiece to another person.
- DO NOT change the position of the function switch while the handpiece is operating.

## To Operate the Handpiece (continued)



### WARNINGS:

- DO NOT operate the handpiece in the drill mode position when a reamer attachment and/or accessory is installed in the handpiece.
- Before operating the handpiece, ALWAYS gently tug the attachment and accessory to make sure the attachment is securely locked in the handpiece and the accessory is securely locked in the attachment.
- DO NOT change the position of the shift collar while the handpiece is operating.
- DO NOT grasp or touch any rotating component while the handpiece is operating.
- This equipment is suitable to use in a professional healthcare facility environment.
- ALWAYS operate the equipment within the specified environmental condition values. See the *Specifications* section.
- ALWAYS follow the recommended duty cycle to prevent the equipment from overheating. See the *Specifications* section and/or the instructions for use supplied with the attachment.
- DO NOT apply excessive pressure, such as bending or prying, with the accessory. Excessive pressure may bend or fracture the accessory and result in tissue damage, loss of tactile control, and/or the ejection of accessory fragments at a high velocity.

- A wobbling attachment and/or accessory may cause bone or tissue damage or inaccurate wire or pin placement. If wobbling occurs, take corrective action as indicated in the *Troubleshooting* section.

### CAUTIONS:

- DO NOT stall the handpiece. Failure to comply may damage the electric motor and/or battery pack. If the handpiece jams, release the trigger immediately. Remove any obstructions before continuing to operate the handpiece.
  - If any power loss is experienced while using the handpiece, ALWAYS replace the battery pack with a fully charged battery pack. Failure to comply may result in a drained or damaged battery pack with a shortened life.
1. Rotate the shift collar to the drill mode or ream mode position.
  2. Slide the function switch to the forward or forward/reverse/oscillate position.
  3. Depress the pressure-sensitive trigger for variable speed operation.

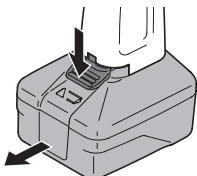


## To Remove the Battery Pack



**WARNING:** ALWAYS slide the function switch to the safe mode position before removing the battery pack.

Depress the battery latch and slide the battery pack out of the handpiece.

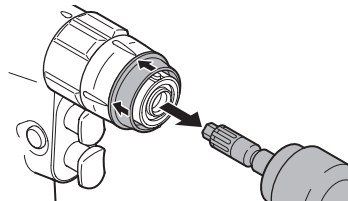


## To Remove the Attachment and Accessory



**WARNING:** ALWAYS slide the function switch to the safe mode position before removing the attachment or accessory.

1. Remove the accessory from the attachment.
2. Pull the attachment collar back and remove the attachment from the handpiece.



## Care Instructions

For processing instructions and disposal/recycle information, see the care instructions manual supplied with the equipment.

## Troubleshooting



**WARNING:** DO NOT disassemble or service this equipment.

**NOTE:** For service, contact your Stryker sales representative or call Stryker customer service. Outside the US, contact your nearest Stryker subsidiary.

PROBLEM	CAUSE	ACTION
The handpiece does not operate or operates at a reduced speed.	The battery pack is discharged.	Use a Stryker battery charger to recharge the battery pack.
	The battery pack is expended.	Replace the battery pack.
	The function switch is in the safe mode position.	Slide the function switch to the forward or forward/reverse/oscillate position.
	The drivetrain is malfunctioning.	Return the handpiece to Stryker for repair.
The handpiece operates but the accessory does not move.	The attachment is not fully installed in the handpiece.	Remove and install the attachment. Make sure the attachment is securely locked in the handpiece.
	The shift collar is positioned between the drill and ream mode positions.	Fully rotate the shift collar to either the drill mode or ream mode position.
	Excessive pressure is being applied to the cutting accessory.	Release the pressure and allow the cutting accessory to do the cutting.
	The drivetrain is malfunctioning.	Return the handpiece to Stryker for repair.
The handpiece continues to operate after the trigger is released.	The trigger is malfunctioning.	Depress the battery latch and slide the battery pack out of the handpiece. Return the handpiece to Stryker for repair.
The battery pack becomes unusually hot during use.	The circuitry is malfunctioning.	Use a Stryker battery charger to check the integrity of the battery pack. See the instructions for use supplied with the battery charger for more information. Replace the battery pack if required.

## Troubleshooting (continued)

PROBLEM	CAUSE	ACTION
The attachment will not fit or cannot be secured in the handpiece.	The attachment and/or the distal end of the handpiece contains debris.	Use a small brush with stiff, non-metallic bristles to clean the attachment and/or the distal end of the handpiece.
	The attachment is damaged.	Return the attachment to Stryker for repair.
	The handpiece is damaged.	Return the handpiece to Stryker for repair.
The attachment and/or accessory wobbles in the handpiece.	The accessory is damaged.	Inspect the accessory for damage and replace the accessory as required.
	The accessory is the wrong size for the attachment.	Install a different accessory or attachment as required.
	The accessory extends too far from the distal end of the attachment, or is not properly centered in the attachment.	Remove and properly install the accessory. If wobble persists, return the handpiece and attachment to Stryker for repair.
	A reamer attachment and/or accessory is installed in the handpiece and the shift collar is in the drill mode position.	Rotate the shift collar to the ream mode position.
The handpiece is noisy and/or vibrates.	The drivetrain is malfunctioning.	Return the handpiece to Stryker for repair.
The handpiece experiences sporadic electrical interference.	Electrical noise is present.	Turn off all electrical equipment not in use in the operating room.
		Relocate electrical equipment and/or increase spatial distance between electrical equipment.
		Plug operating room equipment into different operating room outlets.


## Specifications



**WARNING:** ALWAYS check any documentation that accompanies attachments, burs, pins, and/or blades for special duty cycle and usage instructions.

**CAUTION:** ALWAYS store the equipment within the specified environmental condition values throughout its useful life.

**NOTE:** Specifications are approximate and may vary between devices or as a result of power supply fluctuations.

<b>Model:</b>	System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000)	
<b>Dimensions:</b>	153 mm [6.1 inch] height 38 mm [1.5 inch] width 153 mm [6.1 inch] length	
<b>Mass:</b>	0.99 kg [2.2 lb]	
<b>Speed:</b>	1200 rpm (drill) 270 rpm (ream)	
	<b>Forward and Reverse Modes</b>	<b>Oscillate Mode</b>
<b>Mode of Operation:</b>	Non-continuous Operation	Non-continuous Operation
Duty Cycle:	1 minute on/4 minutes off, 3 times	15 seconds on/15 seconds off, 5 times
Rest Between Cycles:	3 hours	1.5 hours
<b>Maximum Temperature of Applied Part:</b>	Less than 51 °C [124 °F] (Maximum surface temperature as tested to the standards listed under <i>Product Safety Certification</i> .)	
<b>Power Supply:</b>	Internally Powered Refer to battery housing for voltage rating.	
<b>Ingress Protection:</b>	IPX0 Ordinary Equipment	
<b>Equipment Type:</b>	 Type BF Applied Part	

## Specifications (continued)

**Product Safety  
Certification:**



CSA International

**Canadian Standards Association (CSA)**

CAN/CSA-C22.2 No. 60601-1:14, *Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance*; (IEC 60601-1:2005+A1:2012, MOD)

**American National Standards Institute (ANSI)/Association for the Advancement of Medical Instrumentation (AAMI)**

ANSI/AAMI ES60601-1:2005/(R) 2012, *Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance*; Consolidated Reprint (2009)/(R) 2012; Amendment 2 (2010)/(R) 2012; Amendment 1 (2012)

**Product Safety  
Compliance:**

**International Electrotechnical Commission (IEC)**

IEC 60601-1:2005, Ed: 3.1, *Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance*; Corrigendum 1 (2006); Corrigendum 2 (2007); Amendment 1 (2012)

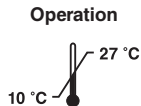
**European Committee for Electrotechnical Standardization (CENELEC)**

EN 60601-1:2006+A12:2014, Ed: 3.1, *Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance*; IEC Corrigendum 1 (2006); IEC Corrigendum 2 (2007); CENELEC Corrigendum (2010); CENELEC Amendment A11 (2011); IEC Amendment 1 (2013); IEC Corrigendum 3 (2014); CENELEC Amendment A12 (2014)

## Specifications (continued)

### Environmental Conditions:

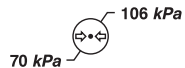
Temperature Limitation:



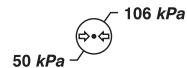
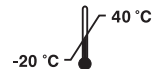
Humidity Limitation:




Atmospheric Pressure  
Limitation:



### Storage and Transportation



## Specifications (continued)

Guidance and manufacturer's declaration - electromagnetic emissions		
The System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) is intended for use in the electromagnetic environment specified below. The customer or the user of the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment - guidance
RF emissions CISPR 11	Group 1	The System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes, provided the following warning is heeded:
Harmonic emissions IEC 61000-3-2	N/A	
Voltage fluctuations/flicker emissions IEC 61000-3-3	N/A	
		 <p><b>WARNING:</b> This equipment/system is intended for use by healthcare professionals only. This equipment/system may cause radio interference or may disrupt the operation of nearby equipment. Mitigation measures may be necessary, such as reorienting or relocating the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) or shielding the location.</p>

## Specifications (continued)

<b>Guidance and manufacturer's declaration - electromagnetic immunity</b>			
<p>The System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) is intended for use in the electromagnetic environment specified below. The customer or the user of the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) should assure that it is used in such an environment.</p> <p><b>NOTE:</b> The values provided in the table below have changed due to 60601-1-2 4th Edition requirements.</p>			
<b>Immunity test</b>	<b>IEC 60601 test level</b>	<b>Compliance level</b>	<b>Electromagnetic environment - guidance</b>
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 kV air	± 8 kV contact ± 2 kV, ± 4 kV, ± 8 kV, ± 15 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 at 100 kHz repetition frequency for power supply lines ± 1 kV at 100 kHz repetition frequency for input/output lines	N/A	N/A
Surge IEC 61000-4-5	± 0.5 kV, ± 1 kV line(s) to line(s) ± 0.5 kV, ± 1 kV, ± 2 kV line(s) to earth	N/A	N/A





Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	$<5\% U_T$ ( $>95\%$ dip in $U_T$ ) for 0,5 cycle $40\% U_T$ (60% dip in $U_T$ ) for 5 cycles $0\% U_T$ (100% dip in $U_T$ ) for 0.5 cycle at $0^\circ, 45^\circ, 90^\circ, 135^\circ, 180^\circ, 225^\circ, 270^\circ,$ and $315^\circ$ $0\% U_T$ ( $>100\%$ dip in $U_T$ ) for 1 cycle at $0^\circ$ $70\% U_T$ (30% dip in $U_T$ ) for 25 and 30 cycles at $0^\circ$ $<5\% U_T$ ( $>95\%$ dip in $U_T$ ) for 5 seconds $0\% U_T$ (100% dip in $U_T$ ) for 250/300 cycles	N/A	N/A
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m, 30 A/m at 50 and 60 Hz	3 A/m, 30 A/m at 50 and 60 Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

NOTE:  $U_T$  is the alternating current mains voltage prior to application of the test level.

## Specifications (continued)

Guidance and manufacturer's declaration - electromagnetic immunity			
The System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) is intended for use in the electromagnetic environment specified below. The customer or the user of the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) should assure that 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 V 0.15 MHz – 80 MHz  6 V in ISM bands between 0.15 MHz and 80 MHz  80% AM at 1 kHz	N/A	IEC 60601-1-2 3rd Edition:  Portable and mobile RF equipment should be used no closer to any part of the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000), including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
Radiated RF IEC 61000-4-3	<sup>b</sup> 3 V/m 80 MHz to 2.7 GHz 80% AM at 1 kHz  27 V/m 385 MHz, pulse modulation 18 Hz, Maximum power = 1.8 W  28 V/m 450 MHz, FM ± 5 kHz deviation, 1 kHz sine, Maximum power = 2 W	<sup>b</sup> 3 V/m 80 MHz to 2.7 GHz 80% AM at 1 kHz  27 V/m 385 MHz, pulse modulation 18 Hz, Maximum power = 1.8 W  28 V/m 450 MHz, FM ± 5 kHz deviation, 1 kHz sine, Maximum power = 2 W	Recommended separation distance:  $d=1.2\sqrt{P}$ 80 MHz to 800 MHz  $d=2.3\sqrt{P}$ 800 MHz to 2.5 GHz  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 distance in meters (m).

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment - guidance
Radiated RF IEC 61000-4-3	9 V/m 710, 745, 780, 5240, 5500, 5785 MHz, pulse modulation 217 Hz, Maximum power = 0.2 W  28 V/m 810, 870, 930 MHz, pulse modulation 18 Hz, Maximum power = 2 W  28 V/m 1720, 1845, 1970, 2450 MHz, pulse modulation 217 Hz, Maximum power = 2 W	9 V/m 710, 745, 780, 5240, 5500, 5785 MHz, pulse modulation 217 Hz, Maximum power = 0.2 W  28 V/m 810, 870, 930 MHz, pulse modulation 18 Hz, Maximum power = 2 W  28 V/m 1720, 1845, 1970, 2450 MHz, pulse modulation 217 Hz, Maximum power = 2 W	IEC 60601-1-2 4th Edition:   <b>WARNING:</b> Portable RF equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000), including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.  Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey, <sup>a</sup> should be less than the compliance level in each frequency range. <sup>b</sup> Interference may occur in the vicinity of equipment marked with the following symbol:   (Non-ionizing electromagnetic radiation)

NOTE 1: At 80 MHz and 800MHz 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.

<sup>a</sup> 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 System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) is used exceeds the applicable RF compliance level above, the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000).

<sup>b</sup> Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

## Specifications (continued)

<b>IEC 60601-1-2 3rd Edition: Recommended separation distances between portable and mobile RF equipment and the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000)</b>			
The System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) is intended for use in the electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF equipment (transmitters) and the System 7 Dual Trigger Rotary Handpiece (REF 7205-000-000) as recommended below, according to the maximum output power of the equipment.			
<b>Rated maximum output power of transmitter W</b>	<b>Separation distance according to frequency of transmitter m</b>		
	<b>150 kHz to 80 MHz</b>	<b>80 MHz to 800 MHz</b>	<b>800 MHz to 2.5 GHz</b>
	N/A	$d=1.2\sqrt{P}$	$d=2.3\sqrt{P}$
0.01	N/A	0.12	0.23
0.1	N/A	0.38	0.73
1	N/A	1.2	2.3
10	N/A	3.8	7.3
100	N/A	12	23

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 and 800MHz, 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.







ES/DE/FR/IT/NL 7205-001-710  
JA/ZH/KO 7205-001-720  
SV/DA/FI/PT/NO 7205-001-730  
PL/EL 7205-001-750



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