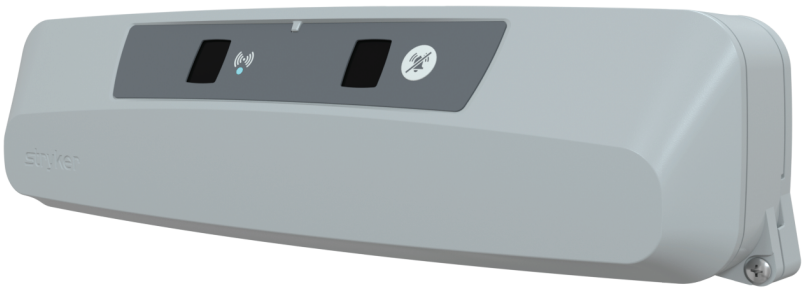
Secure Connect

Operations/Maintenance Manual

REF 521200380100

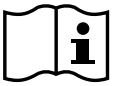


EN

Global symbol glossary

See the Global Symbol Glossary at ifu.stryker.com for symbol definitions.

Symbols

	Refer to instruction manual/booklet
	Consult instructions for use
	General warning
	Caution
	Non-ionizing radiation
	China RoHS with declarable substances
REF	Catalogue number
SN	Serial number
MD	European medical device
CE	CE mark
UK CA	UK Conformance Assessment mark
	Importer
UDI	Unique device identifier
QTY	Quantity
EC REP	Authorized representative in the European Community
CH REP	Authorized representative in Switzerland

US Patents	For US Patents see www.stryker.com/patents
	Manufacturer
	Date of manufacture
~	Alternating current
	Direct current
IPX4	Protection from liquid splash
	Class II electrical equipment: equipment in which protection against electric shock does not rely on basic insulation only, but in which additional safety precautions such as double insulation or reinforced insulation are provided, there being no provision for protective earthing or reliance upon installation conditions.
	Medical Equipment Classified by Underwriters Laboratories Inc. With Respect to Electric Shock, Fire, and Mechanical Hazards Only in Accordance with ANSI/AAMI ES60601-1:2005/(R)2012 and A1:2012 C1:2009/(R)2012 and A2:2010/(R)2012, CAN/CSA-C22.2 No. 60601-1:14, IEC 60601-2-52:2009/A1:2015, CAN/CSA-C22.2 No. 60601-2-52:11 with Amendment 1:2017.
	Telecommunications and Digital Government Regulatory Authority logo for United Arab Emirates
	Australia/New Zealand Regulatory Compliance Mark (RCM)
R-NZ	New Zealand radio compliance mark
	To indicate that separate collection for batteries is required per the European Union's Batteries and Waste Regulation (EU) 2023/1542. This symbol may be accompanied by the abbreviated designation of the battery material(s) used.
	In accordance with European Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) as amended, this symbol indicates that the product should be collected separately for recycling. Do not dispose of as unsorted municipal waste. Contact local distributor for disposal information. Ensure infected equipment is decontaminated prior to recycling.
 Pb	To indicate that separate collection for batteries is required per the European Union's Batteries and Waste Batteries Regulation (EU) 2023/1542. This symbol may be accompanied by the abbreviated designation of the battery material(s) used. Pb = battery contains more than 0.004 % by weight of lead
	Pb lead, recycle, return

Table of Contents

Warning/Caution/Note Definition

The words **WARNING**, **CAUTION**, and **NOTE** carry special meanings and should be carefully reviewed.

WARNING

Alerts the reader about a situation which, if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.

CAUTION

Alerts the reader of a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the product or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to a device that may occur as a result of use or misuse.

Note - Provides special information to make maintenance easier or important instructions clearer.

Summary of safety precautions

Always read and strictly follow the warnings and cautions listed on this page. Service only by qualified personnel.

WARNING

- Portable RF communications equipment, including peripherals such as antenna cables and external antennas, should be no closer than 12 inches (30 cm) to any part of the Secure Connect locator, including cables specified by the manufacturer.
- Avoid stacking or placing equipment adjacent with other equipment to prevent improper operation of the product. If such use is necessary, carefully observe stacked or adjacent equipment to make sure that they operate properly.
- The use of accessories, transducers, and cables, other than those specified or provided by the manufacturer, could result in increased electromagnetic emissions or decreased electromagnetic immunity and result in improper operation.

CAUTION

- Improper usage of the product can cause injury to the patient or operator. Operate the product only as described in this manual.
- Do not modify the product or any components of the product. Modifying the product can cause unpredictable operation resulting in injury to patient or operator. Modifying the product also voids its warranty.
- Always match the dip-switches on SB1 and SB2 to the connected product configuration to avoid the risk of head wall damage.
- Always match the dip-switches of a product to the head wall configuration if a nurse call communication cable needs to be connected to avoid the risk of head wall damage.
- Always match the dip-switches on SB1 and SB2 to the product configuration to avoid the risk of head wall damage.
- Do not clean, disinfect, service, or perform maintenance while the product is in use.
- Always unplug the power cord from the wall outlet when large spills occur near the circuit boards and cables. Clean up the fluid, and inspect the product. Fluids can cause unpredictable operation and decreased functionality of any electrical product. Do not return the product to service until dry and tested for safe operation.
- Always wipe down with clean water (or 70% isopropyl alcohol, if using **Virex**® TB) and dry each product after disinfecting. Some disinfectants are corrosive in nature and may cause damage to the product. If you do not rinse and dry the product, you may leave a corrosive residue on the surface of the product. This corrosive residue could cause premature degradation of critical components. Failure to follow these disinfecting instructions may void your warranty.
- This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

Introduction

This manual assists you with the operation or maintenance of your Stryker product. Read this manual before operating or maintaining this product. Set methods and procedures to educate and train your staff on the safe operation or maintenance of this product.

CAUTION

- Improper usage of the product can cause injury to the patient or operator. Operate the product only as described in this manual.
- Do not modify the product or any components of the product. Modifying the product can cause unpredictable operation resulting in injury to patient or operator. Modifying the product also voids its warranty.

Note - Stryker continually seeks advancements in product design and quality. This manual contains the most current product information available at the time of printing. There may be minor discrepancies between your product and this manual. If you have any questions, contact Stryker Customer Service or Technical Support at 1-800-327-0770.

Product description

The Stryker Model 521200380100 Secure Connect is a cable-free nurse call solution. Secure Connect allows for patient nurse communication via the nurse call button, room controls, and TV controls without the need for any cables or wires.

Contraindications

None known.

Expected service life

The Secure Connect has a 10 year expected service life under normal use conditions and with appropriate periodic maintenance.

The battery has a two year expected service life under normal use conditions.

Disposal/recycle

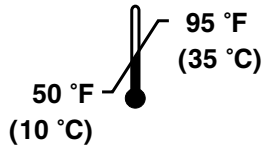
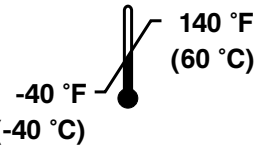
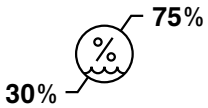
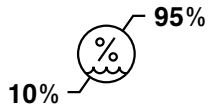
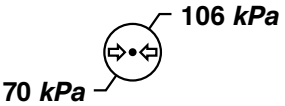
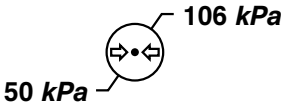
Always follow the current local recommendations and/or regulations governing environmental protection and the risks associated with recycling or disposing of the equipment at the end of its useful life.

Specifications

Length	16.3 in.	41.1 cm
Width	3.3 in.	8.4 cm
Depth	4.3 in.	10.9 cm
Weight	4 lb	1.8 kg
System voltage rating	AC supply: 100-240 VAC, 50/60 Hz, 0.8A	
	Secure Connect: 18 VDC, 1.67A	
Wireless connection	Uses infrared (IR) LED and Bluetooth based on Stryker proprietary communication scheme **Note -** Minimum signal strength of the Secure Connect must be within 3dB of the connected product. Make sure the product is within 5.5 ft (1.7 m) of the Secure Connect.	

Stryker reserves the right to change specifications without notice.

Specifications listed are approximate and may vary slightly from product to product or by power supply fluctuations.

Environmental conditions	Operation	Storage and transportation
Ambient temperature		
Relative humidity (non-condensing)		
Atmospheric pressure		

In accordance with the European REACH regulation and other environmental regulatory requirements, the components that contain declarable substances are listed.

Description	Number	Substance of very high concern (SVHC) chemical name
Rechargeable battery	700000341245	Lead
Wallside room interface board	521200380950/521201380950	Decamethylcyclopentasiloxane, dodecamethylcyclohexasiloxane, lead, octamethylcyclotetrasiloxane

European battery specifications

In accordance with the European Community Batteries and Waste Batteries regulation, required battery information is included below.

Description	Number	Quantity	Voltage	Capacity
Rechargeable battery	700000341245	1	12 V	1.2 Ah

Bluetooth radio specifications

Item	Specification - Chipset WT32i (Silicon Labs)			Unit
	Channel	Min	Max	
Operating frequencies	79	2.4	2.4835	GHz
Receiving bandwidth	Not applicable	1		MHz
Maximum ERP	Not applicable	-24.148		dBW

Hereby, Stryker declares that the radio equipment type Cordless Nurse Call Interface is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://techweb.stryker.com/EU_Declaration_of_Conformity/index.html.

Contact information

Contact Stryker Customer Service or Technical Support at: 1-800-327-0770.

Stryker Medical

3800 E. Centre Avenue

Portage, MI 49002

USA

Note - The user and/or the patient should report any serious product-related incident to both the manufacturer and the Competent authority of the European Member State where the user and/or patient is established.

To view your operations or maintenance manual online, see https://techweb.stryker.com/.

Have the serial number (A) of your Stryker product available when calling Stryker Customer Service or Technical Support. Include the serial number in all written communication.

Serial number location

The Stryker serial number and bed bay identification number (BBID) label (A) is located on the bottom of the product (Figure 1).

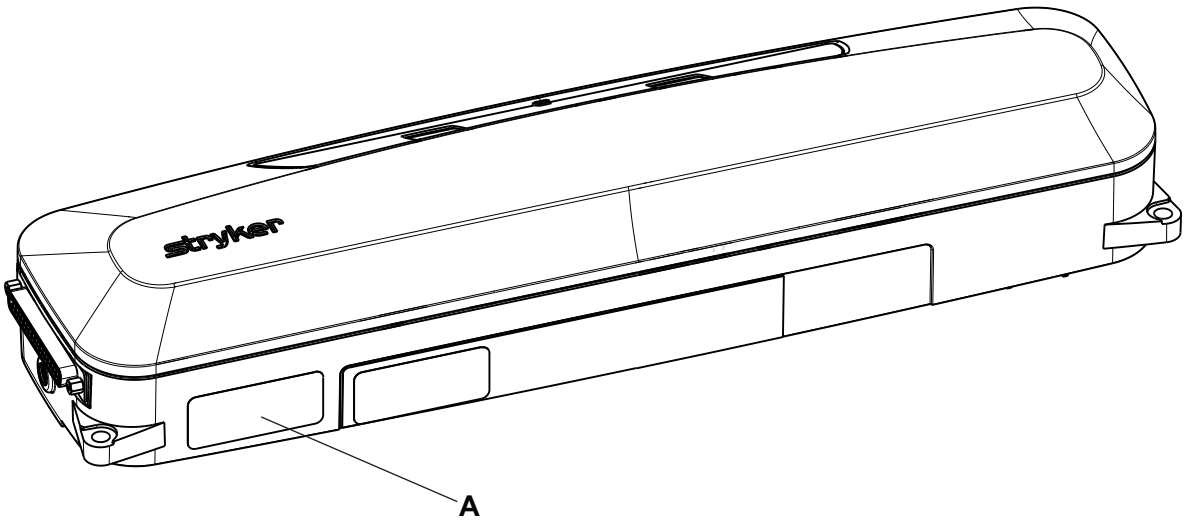


Figure 1 – Stryker serial number and BBID location

Date of manufacture

The date of manufacture is the first four digits of the serial number.

YYMM (YY = year and MM = month)

Installation

Installing Secure Connect

Tools required:

- #2 Phillips screwdriver
- #1 Phillips screwdriver
- Straight pick
- Tape measure
- Level
- Pencil
- Tools required for hospital supplied fasteners

Procedure:

1. Record the Secure Connect BBID (*Serial number location* (page 5)) and room number/patient position on the *Secure Connect association form* (page 19).
2. Using a straight pick, configure the SB1 and SB2 dip-switches (A) to match the nurse call system and nurse call communication cable (Figure 2).

CAUTION - Always match the dip-switches on SB1 and SB2 to the connected product configuration to avoid the risk of head wall damage.

Note - To confirm dip-switch configuration, contact Stryker customer service or technical support (*Contact information* (page 4)).

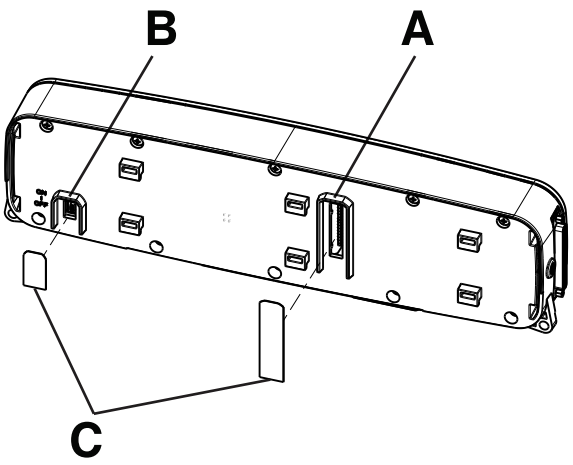


Figure 2 – Switch configuration

3. Using a straight pick, turn the Secure Connect **ON/OFF** switch (B) to the **ON** position (Figure 2).
4. Affix the two supplied IPX labels (C) over the dip-switch and the **ON/OFF** cutouts located on the back of the Secure Connect (Figure 2).
5. Using a tape measure and pencil, mark the intended center of the bed location (vertical line) (Figure 3).

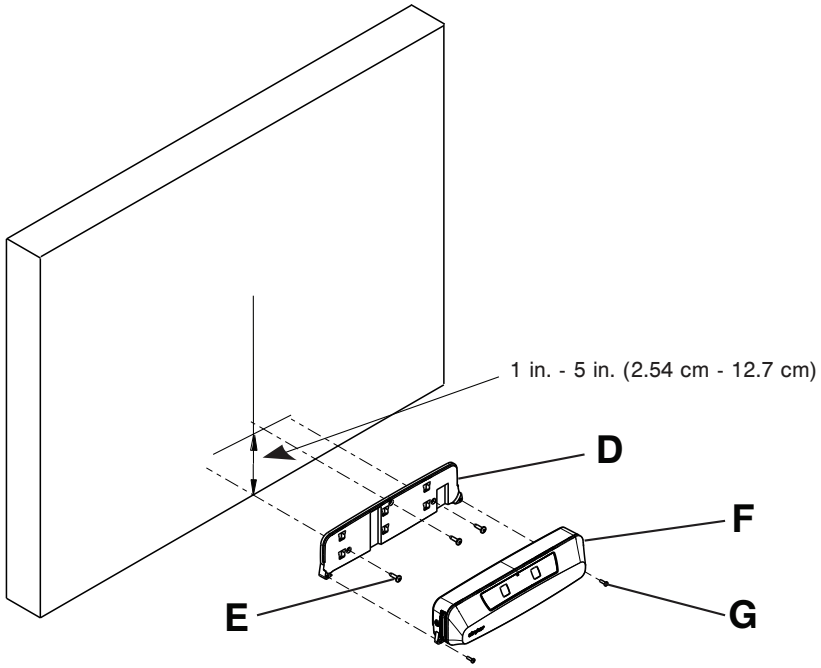


Figure 3 – Mounting specifications

6. Center the mounting plate on the vertical line made in step 5 and mount the bottom of the mounting plate max 1 in. (2.54 cm) off the floor (Figure 3).

   Note
   - Do not mount on a baseboard if the baseboard thickness exceeds 1 in. (2.54 cm).
   - You may mount the bottom of the mounting plate up to 5 in. from the floor if you can always maintain a distance of at least 5 in. between the head end of the bed and the wall. Consider use of a floor threshold or roller bumpers.
7. Using a level on the bottom of the mounting plate (D), make sure that the bottom of the mounting plate (D) is level when you position the mounting plate (D) on the reference marks made in steps 5 and 6 (Figure 3).
8. Use a pencil to mark the three screw holes of the mounting plate (D).
9. Using the appropriate tool with the hospital supplied fasteners (E, not included), secure the mounting plate (D) to the wall (Figure 3).
10. Attach the Secure Connect (F) to the mounting plate (D) (Figure 3).
11. Using a #2 Phillips screwdriver, secure the Secure Connect (F) to the mounting plate (D) with the two supplied screws (700001126359) (G) (Figure 3).
12. Plug the Secure Connect power supply into a hospital grade protective earthed wall outlet.

    Note - Position the power supply in an accessible location.
13. On the Secure Connect, plug in the female end of the power supply.
14. On the Secure Connect, plug in the nurse call communication cable.
15. Using a #1 Phillips screwdriver, secure the nurse call communication cable to the Secure Connect.
16. Connect and secure the nurse call communication cable to the nurse call system wall plug.
17. See *Configuring the Secure Connect* (page 9).
18. Follow the procedure in the product manual to connect the product to the Secure Connect.

CAUTION - Always match the dip-switches of a product to the head wall configuration if a nurse call communication cable needs to be connected to avoid the risk of head wall damage.

Note
- If a Secure Connect is moved, repeat steps 1 and 10-17.
- If a product is moved to another configured Secure Connect, no change needs to be made as the product will connect automatically.

Installation checklist

Follow this checklist for the 521200380100 Secure Connect:

_____ Confirm that you do not have any unused components after installation. Your Secure Connect does not ship with any extra components

_____ Check that the Secure Connect ID number and room number/location has been recorded on the *Secure Connect association form* (page 19)

_____ Use a tape measure to check that the Secure Connect is installed at the horizontal center of the wall behind the bed location

_____ Use a tape measure to check that the bottom of the Secure Connect is installed 1 in. - 5 in. (2.54 cm - 12.7 cm) from the floor

_____ Use a level to confirm that the mounting plate is level

_____ All fasteners are tight with no signs of protruding or missing fasteners

_____ Power supply is plugged into a hospital grade protective earthed wall outlet and to the Secure Connect

_____ Nurse call communication cable is plugged into the Secure Connect and the nurse call system

Product ID number:			
Installed by:		Date:	
Inspected by:		Date:	

Note - Maintain a copy of this record for at least 10 years.

Operation

Secure Connect indicators/functions

The Secure Connect has indicator symbols and a nurse call cord out cancel button (A) that is located on top of the product. This button cancels the alert if the nurse call communication cable is unplugged.

Indicator	Indicator light	Status
	Solid	Connected
	Pulse	Connecting
	Flash	Connection error
	Pulse	AC power unplugged
	Flash	Low battery
	Pulse	Nurse call communication cable unplugged
	Solid	The Secure Connect is not configured
	Flash	Error (reference product display for error detail)
	Flash	Battery error

Configuring the Secure Connect

Tools required:

- Secure Connect scanner option (521200380700) or Secure Connect compatible product
- Stryker service tool option (521205080001)

Note - Stryker service tool required if you use the Secure Connect scanner.

CAUTION - Always match the dip-switches on SB1 and SB2 to the product configuration to avoid the risk of head wall damage.

Procedure:

Using the Secure Connect scanner:

1. Using the Stryker service tool, select the supplied soft configuration and settings.
2. Select **Save Configuration** (A) (Figure 4).

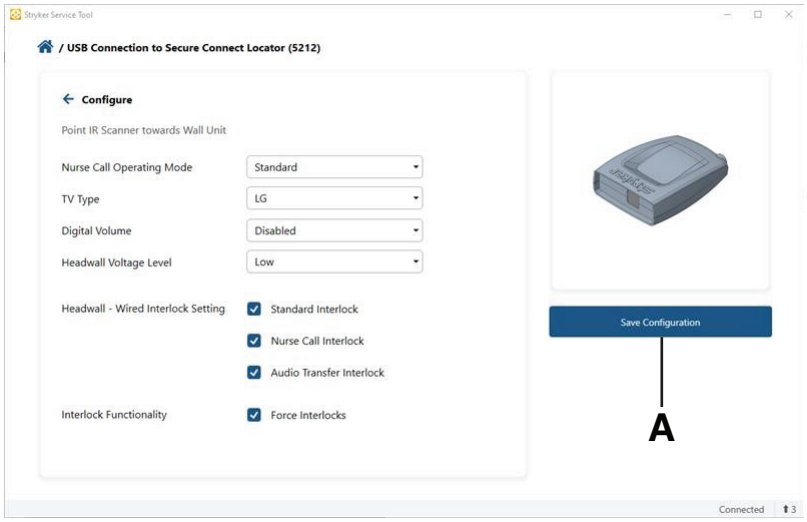


Figure 4 – Stryker service tool

Using a ProCuity bed:

1. Apply the brakes.

   Note - See the Model 3009 ProCuity Operations Manual for steps to apply the brakes.
2. Confirm the Secure Connect connection to ProCuity.

   Note - The icon will appear on the ProCuity home screen when Secure Connect has connected.
3. Enter the service menu and select **Configuration** (B) (Figure 5).

   Note - See the Model 3009 ProCuity Maintenance Manual for steps to access the service menu.

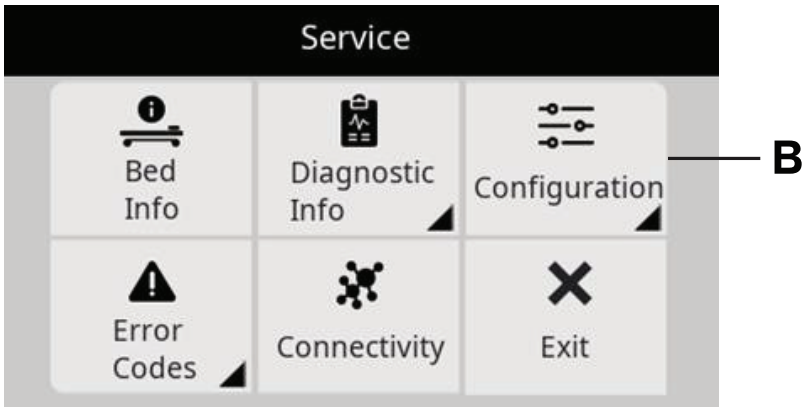


Figure 5 – ProCuity service menu

4. In the configuration menu, select **Room Interface Configuration** (C) (Figure 6).

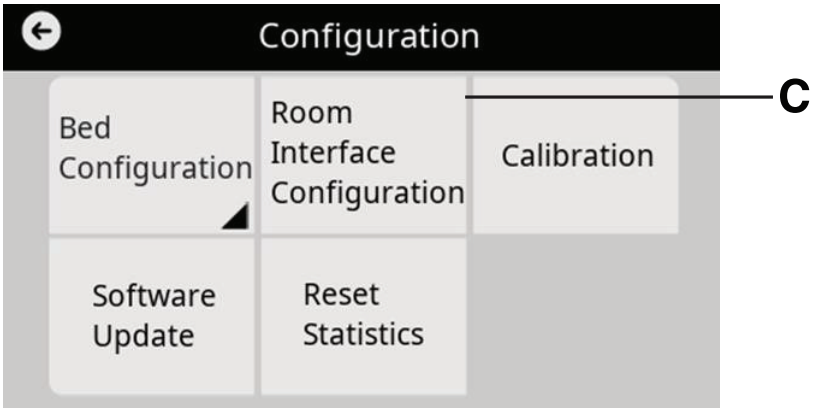


Figure 6 – ProCuity configuration menu

5. Input the supplied settings and select **Save**.

Testing the Secure Connect

Tools required:

- Secure Connect scanner option (521200380700) or Secure Connect compatible product
- Stryker service tool option (521205080001)

Note - Stryker service tool required if you use the Secure Connect scanner.

Procedure:

Secure Connect scanner:

Using the Stryker service tool test function, activate the nurse call.

ProCuity bed:

Using the footboard and siderail control panels, activate the nurse call.

Note - See the Model 3009 ProCuity Operations Manual for steps to activate nurse call.

Preventive maintenance

Remove product from service before you perform the preventive maintenance inspection. Check all items listed during annual preventive maintenance for all Stryker Medical products. You may need to perform preventive maintenance checks more often based on your level of product usage. Service only by qualified personnel.

Inspect the following items:

_____ All fasteners are secure

_____ The Secure Connect casing is not cracked or damaged

_____ Mounting plate not cracked or damaged

_____ The Secure Connect front label is not damaged

_____ Replace the battery (every two years)

Product serial number:
Completed by:
Date:

Cleaning

CAUTION

- Do not clean, disinfect, service, or perform maintenance while the product is in use.
- Always unplug the power cord from the wall outlet when large spills occur near the circuit boards and cables. Clean up the fluid, and inspect the product. Fluids can cause unpredictable operation and decreased functionality of any electrical product. Do not return the product to service until dry and tested for safe operation.

Recommended cleaning method:

1. Using spray or pre-soaked wipes, hand wash all exposed surfaces of the product with a mild detergent.
2. Follow the cleaning solution manufacturer's instructions for appropriate contact time and rinse requirements.
3. Dry the product before you return it to service.

Note - Avoid oversaturation. Do not allow the product to remain wet.

Disinfecting

CAUTION

- Do not clean, disinfect, service, or perform maintenance while the product is in use.
- Always unplug the power cord from the wall outlet when large spills occur near the circuit boards and cables. Clean up the fluid, and inspect the product. Fluids can cause unpredictable operation and decreased functionality of any electrical product. Do not return the product to service until dry and tested for safe operation.
- Always wipe down with clean water (or 70% isopropyl alcohol, if using **Virex**® TB) and dry each product after disinfecting. Some disinfectants are corrosive in nature and may cause damage to the product. If you do not rinse and dry the product, you may leave a corrosive residue on the surface of the product. This corrosive residue could cause premature degradation of critical components. Failure to follow these disinfecting instructions may void your warranty.

Recommended disinfectants for this product's surfaces include:

- Quaternary (active ingredient - ammonium chloride)
- Phenolic (active ingredient - o-phenylphenol)
- Chlorinated bleach solution (10,000 ppm available chlorine, 941 mL of a 5.25% sodium hypochlorite solution per 4000 mL of water)
- Alcohol (active ingredient - 70% isopropyl alcohol)
- Accelerated hydrogen peroxide (5,000 ppm hydrogen peroxide)

Disinfection method:

1. Follow the disinfectant solution manufacturer's dilution recommendations.
2. Using spray or pre-soaked wipes, apply the recommended disinfectant solution.
3. Hand wash all exposed surfaces of the product with the recommended disinfectant.
4. Dry the product before you return it to service.

Note

- Avoid oversaturation. Do not allow the product to remain wet.
- Follow the manufacturer's dilution recommendations for appropriate contact time and rinse requirements. Follow the chemical manufacturer's guidelines to disinfect.

Wireless notifications

For product equipped with wireless communication technology, these statements apply to the countries as indicated:

Country	Notification
Canada	Contains IC: 7922A-3034 This device complies with Innovation, Science and Economic Development Canada's license-exempt RSSs. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.
Mexico	La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.
Singapore	Complies with IMDA standards DA103640
Taiwan	CONTAINS: CCAQ24Y10100T4 取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。
Thailand	กสทช. เครื่องวิทยุคมนาคมนี้ ได้รับยกเว้น ไม่ต้องได้รับใบอนุญาตให้มี ใช้ซึ่งเครื่องวิทยุคมนาคมหรือตั้งสถานีวิทยุคมนาคมตามประกาศ กสทช. เรื่อง เครื่องวิทยุคมนาคม และสถานีวิทยุคมนาคมที่ได้รับยกเว้นไม่ต้องได้รับใบอนุญาตวิทยุคมนาคมตามพระราชบัญญัติวิทยุคมนาคม พ.ศ. 2498 กสทช. โทรคมนาคม กำกับดูแลเพื่อประชาชน Call Center 1200 (โทรฟรี)
United States	Contains FCC ID: WAP3034 This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

EMC information

WARNING

- Portable RF communications equipment, including peripherals such as antenna cables and external antennas, should be no closer than 12 inches (30 cm) to any part of the Secure Connect locator, including cables specified by the manufacturer.
- Avoid stacking or placing equipment adjacent with other equipment to prevent improper operation of the product. If such use is necessary, carefully observe stacked or adjacent equipment to make sure that they operate properly.
- The use of accessories, transducers, and cables, other than those specified or provided by the manufacturer, could result in increased electromagnetic emissions or decreased electromagnetic immunity and result in improper operation.

CAUTION - This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

The 521200380100 Secure Connect locator was evaluated using the following cables:

Cable	Length (m)
AC mains input cable	1.2
Nurse call (DB-37)	2.4

Guidance and manufacturer's declaration - electromagnetic emissions		
The 521200380100 Secure Connect locator is intended for use in the electromagnetic environment specified below. The customer or the user of the 521200380100 Secure Connect locator should assure that it is used in such an environment.		
Emissions test	**Compliance**	**Electromagnetic environment**
RF Emissions CISPR 11	Group 1	**Note -** The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment (for which CISPR 11 class B is normally required) this equipment might not offer adequate protection to radio-frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment.
RF Emissions CISPR 11	Class A	
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations Flicker Emissions IEC 61000-3-3	Complies	

Guidance and manufacturer's declaration - electromagnetic immunity			
The 521200380100 Secure Connect locator is suitable for use in a professional healthcare facility environment and not in environments exceeding immunity test conditions that the product was evaluated to, such as near high frequency (HF) surgical equipment and inside of the radio frequency (RF) shielded room of magnetic resonance imaging (MRI) equipment. The customer or the user of the 521200380100 Secure Connect locator should assure that it is used in such an environment and that the electromagnetic environment guidance listed below is followed.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment-guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	±8 kV contact ±15 kV air	±8 kV contact ±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%.
Electrostatic 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	Main power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±0.5 kV, ±1 kV lines to lines	±0.5 kV, ±1 kV lines to lines	Main power quality should be that of a typical commercial or hospital environment.

Guidance and manufacturer's declaration - electromagnetic immunity			
Voltage dips, voltage variations and short interruptions on power supply input lines IEC 61000-4-11	0%U_T for 0.5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0%U_T for 1 cycle 70%U_T (30% dip in U_T) for 25/30 cycles 0% U_T for 250/300 cycles	0%U_T for 0.5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0%U_T for 1 cycle 70%U_T (30% dip in U_T) for 25/30 cycles 0% U_T for 250/300 cycles	Main power quality should be that of a typical commercial or hospital environment. If the user of the 521200380100 Secure Connect locator requires continued operation during power main interruptions, it is recommended that the device be powered from an uninterrupted power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	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 a.c. mains voltage before applications of the test level.			
Conducted RF IEC 61000- 4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2.7 GHz	3 Vrms 3 V/m	Portable and mobile RF communications equipment should follow the guidance in the table titled "Recommended separation distances between portable and mobile RF communication equipment and the 521200380100 Secure Connect locator." If the mobile service is not listed in the table, the recommended separation distance should be calculated from the equation appropriate for the frequency of the transmitter. Recommended separation distance $D=(2)(\sqrt{P})$ 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 distance in meters (m). 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]. Interference may occur in the vicinity of equipment marked with the following symbol: 
Note - These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people. **Note -** The ISM (Industrial, Scientific, and Medical) bands between 0.15 MHz and 80 MHz are 6.765 MHz to 6.795 MHz; 13.553 MHz to 13.567 MHz; 26.957 MHz to 27.283 MHz; and 40.66 MHz to 40.70 MHz.			
[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 521200380100 Secure Connect locator is used exceeds the applicable RF compliance level above, the 521200380100 Secure Connect locator should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the 521200380100 Secure Connect locator. [b]Over the frequency range 150 kHz to 80 MHz, field strengths are less than 3 Vrms.			

Recommended separation distances between portable and mobile RF communication equipment and the 521200380100 Secure Connect locator

The 521200380100 Secure Connect locator is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the 521200380100 Secure Connect locator can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the 521200380100 Secure Connect locator, including cables, as recommended below, according to the maximum output power of the communications equipment.

Band (MHz)	Service	Maximum power (W)	Minimum separation distance (m)
380-390	TETRA 400	1.8	0.3
430-470	GMRS 460; FRS 460	2.0	0.3
704-787	LTE Band 13, 17	0.2	0.3
800-960	GSM 800/900; TETRA 800; iDEN 820; CDMA 850; LTE Band 5	2.0	0.3
1,700-1,990	GSM 1800; CDMA 1900; GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	2.0	0.3
2,400-2,570	Bluetooth; WLAN; 802.11 b/g/n; RFID 2450; LTE Band 7	2.0	0.3
5,100-5,800	WLAN 802.11 a/n	0.2	0.3

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

Secure Connect association form

Secure Connect BBID	Room number/Location

Note - Give this form to your Stryker representative or your IT system analyst so they can create the associations on the server.

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WCR: AF.10

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