

SYNK Wireless System

REF Transmitter: 0240-031-010 Display: 0240-031-000

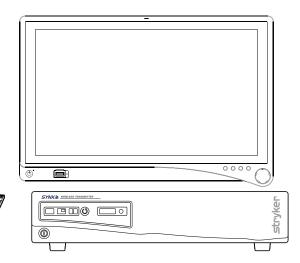




Table of Contents

Warnings and Cautions	3
Warnings	
Cautions	
About Your Device	6
Intended Use and Indications for Use	7
Contraindications	7
System Features	8
SYNK Wireless Transmitter Front Panel	
SYNK Wireless Transmitter Rear Panel	
Setup and Interconnection	
Permanently Linking the Transmitter to an Auxiliary Display	
Removing the the Permanent Link	
Troubleshooting	16
Cleaning and Maintenance	18
Cleaning the Display and Transmitter	
Maintenance	
T 1 1 16 16 1	2.0
Technical Specifications	20
Electromagnetic Compatibility	22
Symbol Definitions	26
•	

Warnings and Cautions

Please read this manual and follow its instructions carefully. The words warning, caution, and note carry special meanings and should be carefully reviewed:

- Warning: Indicates measures to avoid potential serious injury to the user and the patient and/or damage to this device.
- Caution: Indicates risks to the equipment. Failure to follow cautions may result in product damage.
- Note: Provides special information to clarify instructions or present additional useful information.
- \triangle

An exclamation mark within a triangle is intended to alert the user to the presence of important operating and maintenance instructions in the manual.



A lightning bolt within a triangle is intended to warn of the presence of hazardous voltage. Refer all service to authorized personnel.

For all warnings and cautions related to the VisionPro SYNK 26" Wireless LED Display, refer to the display user manual, P22286.

Warnings

To avoid potential serious injury to the user and the patient and/or damage to the system, please note the following warnings:

- Read the operating manual thoroughly and be familiar with its contents prior to using the system.
- Carefully unpack the system and check if any damage occurred during shipment.
- Test this system prior to a surgical procedure. This system was fully tested at the factory before shipment.
- Do not place any heavy object on the power cord. Damage to the power cord can cause fire
 or electric shock.
- This system is not suitable for use in the presence of a flammable anesthetic mixture with air, or with oxygen or nitrous oxide.
- Do not put any liquid or solid object into the display panel, or the transmitter console. If this
 occurs, unplug the device and have it checked by qualified personnel before operating it any
 further.
- Disconnect the transmitter from the electrical outlet when inspecting the fuses.
- To avoid electric shock, do not open the display and transmitter housing.
- Do not touch the device and a patient simultaneously, as there is a risk of electric shock.
- Install this system in an operating room that complies with all applicable IEC, CEC, and NEC requirements for safety of electrical devices. Any installation or connection with other devices shall be evaluated for electrical safety according to the IEC 60601-1.
- Do not modify this equipment without authorization of the manufacturer.
- Attempt no internal repairs or adjustments not specifically detailed in this operating manual.
 Refer any adjustments, modifications, and/or repairs to Stryker Endoscopy or its authorized representatives.
- Use appropriate caution to prevent contact with fluids if the display or transmitter is being
 used with a power supply in patient environments.

- Federal law (United States of America) restricts this device to sale by, or on the order of, a
 physician.
- To avoid risk of electric shock, use only the hospital-grade power cord furnished with the display and/or transmitter. Disconnect the display and/or transmitter from the power supply to make connections or to inspect the equipment.
- To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.

Cautions

- Plug the AC adapter into a grounded power outlet.
- Connect the devices to a hospital grade receptacle to achieve grounding reliability.
- To connect to an international power supply, use an attachment plug appropriate for the power outlet.
- Do not position the devices so that it is difficult to disconnect the power cords from the supply mains.
- Power off the devices when they are not in use.
- Remove the power cord when transporting the transmitter.
- Unplug the display and transmitter if they are not to be used for an extended period of time.
- Never operate the devices immediately after transportation from a cold location to a warm location.
- Pay close attention to the care and cleaning instructions in this manual. A deviation may cause damage.
- Do not install the devices near sunlight, excessive dust, mechanical vibration, or shock.
- Keep the devices away from equipment that uses strong magnets (i.e., large loudspeakers).
- Do not touch the patient with signal input or output connectors. Equipment with SIP/SOP connectors should either comply with IEC 60601-1 harmonized national standard or the combination should be evaluated for safety.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the devices.
 - Note: This device has been tested and found to comply with the limit for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee that interference will not occur in a particular installation, which can be determined by turning the device off and on.

The user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving unit.
- Increase the separation distance between the units.
- Connect the unit to an outlet on a circuit different from that to which the other unit(s)
 are connected.
- Consult the manufacturer or field service technician for help.
- To ensure electromagnetic compatibility, refer to the "Electromagnetic Compatibility" section
 of this manual. The VisionPro SYNK 26" Wireless LED Display (REF 0240-031-000) and the
 SYNK Wireless Transmitter (0240-031-010) must be installed and operated according to the
 EMC information provided in this manual.

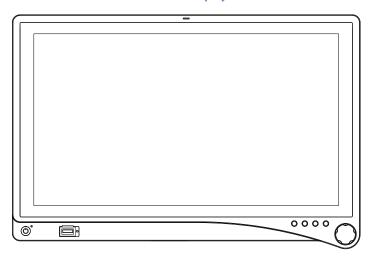
The warranty is void if any of these warnings or cautions are disregarded.

These products contains electrical waste or electronic equipment. They must not be disposed of as unsorted municipal waste and must be collected separately.

About Your Device

The SYNK Wireless System consists of:

VisionPro SYNK 26" Wireless LED Display

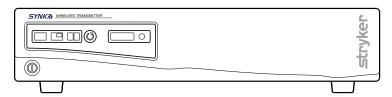


REF: 0240-031-000

The VisionPro SYNK 26" LED Display is a wide screen LED surgical display that can support a maximum resolution of WUXGA (1920x1200). The display supports the following video inputs: DVI, S-Video, and C-Video/SOG. Once the wireless functionality is enabled, the display supports a wireless digital RGB video input. The display also supports a USB port and serial communication via the RS232 port.

Note: For details and instructions on using the VisionPro SYNK 26" Wireless LED Display, refer to the VisionPro User Manual (P22286). This manual provides instructions for using the display and the transmitter together.

SYNK Wireless Transmitter



REF: 0240-031-010

The SYNK Wireless Transmitter allows the VisionPro SYNK 26" Wireless LED Display to receive a high-definition video signal over a radio-frequency link. The transmitter also controls the viewing mode, so the user can switch between picture-in-picture, picture-by-picture, and full screen mode.

Intended Use and Indications for Use

The SYNK Wireless System is intended for video display during surgical procedures including arthroscopy (orthopedic surgery), laparoscopy (general and gynecological surgery), thoracoscopy, endoscopy (general, gastroenterological, and ENT surgery) and general surgery. The system is a non-sterile reusable device not intended for use in the sterile field. The system is intended for use by qualified physicians having complete knowledge of these surgical procedures.

Contraindications

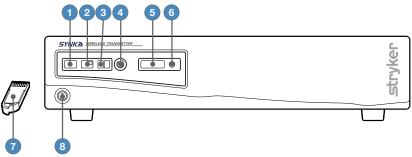
There are no contraindications for these products.

System Features

This section outlines the features of the SYNK Wireless Transmitter. The features of the VisionPro SYNK 26" Wireless LED Display are explained in the VisionPro User Manual (P22286).

Note: The SYNK Wireless Transmitter can only transmit a wireless signal to the VisionPro SYNK Wireless LED Display (0240-031-000). The wireless functionality of the transmitter is not compatible with the Vision Pro 26" LED Display, or WiSE Display and Receiver.

SYNK Wireless Transmitter Front Panel



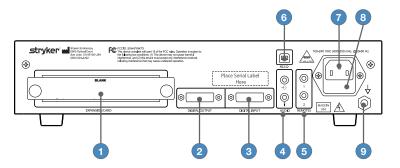
_		
1.	Full Screen mode button	Shows one video feed on the display.
2.	Picture-in-picture mode button	Shows a second video feed in the corner of the display in a smaller overlay.
3.	Picture-by-picture mode button	Shows two video feeds side-by-side.
4.	Source Select button	Toggles the video feeds shown in full screen, picture-by-picture or picture-in-picture mode.
5.	Token Slot	Token insertion site used to establish a wireless connection.
6.	Token LED	Green - Wireless link is established Amber - Initializing Blinking Amber - Error, contact service representative
7.	Token	Initializes the wireless connection after insertion into the transmitter and display.
8.	Power switch (hard)	Powers transmitter ON and OFF.

SYNK Wireless Transmitter Rear Panel



/ Warning

- Only a Stryker representative can remove the video card from the expansion card
- Never touch the device and a patient simultaneously, as there is a risk of electric shock.



Expansion Card Slot

The card slot can accomodate the following video cards:

- DVI-I
- Composite

Contact your Stryker representative for more information.

2. **Digital Input** Connects to a digital input source.

Digital Output Connects to primary display. 3.

Audio Connectors Line-in and Mic-in connectors.

5. **Remotes Connectors** Remote 1 and 2 connectors.

RS232 Port 6. Maintenance port.

7. **AC Power Inlet** Connects to separable power cord that can be used for

mains isolation.

Fuse Panel Contains two 1.6A/250V (slow blow, high breaking 8.

capacity 1500A) fuses.

9. **Equipotential Ground Plug** For connection to an external protective earthing

system as described in the IEC 60601-1 Electrical Safety

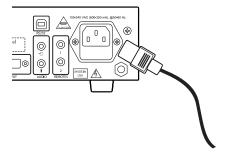
standard.

Setup and Interconnection

Connecting AC power



Always use an approved hospital-grade power cord.



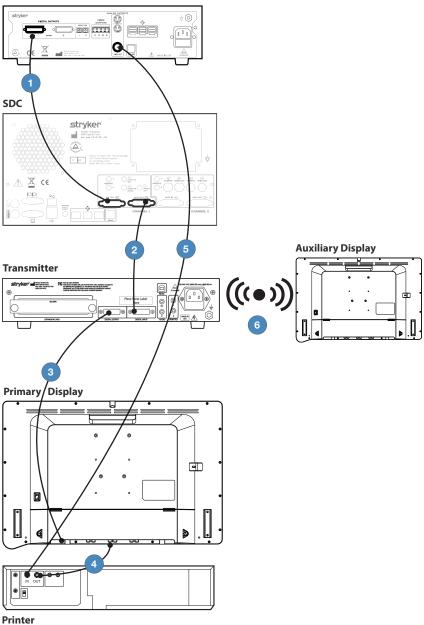
Setting up the SYNK Wireless Transmitter



Warning

- When the transmitter is used with other equipment, leakage currents may be additive. Ensure that all systems are installed according to the requirements of IEC 60601-1.
- Always set up the transmitter in a location that allows adequate ventilation. Insufficient ventilation may cause the transmitter to overheat and shut down.
- Connect the DVI OUT 1 on the camera control unit to the DVI 1 IN on the SDC. 1.
- Connect the DVI 1 OUT on the SDC to the DIGITAL INPUT on the transmitter. 2.
- Connect the DIGITAL OUTPUT on the transmitter to the DVI on the primary display. 3.
- Connect the C-video input on the display to the C-video output on the printer. 4.
- 5. Connect the C-video input on the printer to the C-video output on the camera.
- Link an auxiliary display to the transmitter with the token. (Link the display and transmitter each time the display or transmitter is powered on.)

Camera Control Unit



Configuring the Wireless Settings for the SYNK Wireless Transmitter

The SYNK Wireless System uses a radio-frequency (RF) link to deliver high-definition video signals in real time. Each system uses a portion of the RF spectrum commonly referred to as a "channel" to broadcast its signal. Channels are commonly designated using the formula:

Channel Number = (Frequency in MHz - 5000) / 5.

The SYNK Wireless System can use any available 20 MHz channel in the 5.15-5.825 GHz spectrum. The list of allowed channels is regulated and varies by region.

The 5.15-5.825 GHz spectrum is also used by 802.11a/n devices as well as 5.8 GHz cordless phones. The SYNK Wireless System uses an automatic frequency selection (AFS) mechanism in combination with a passive scanning capability to maintain compatibility with these devices. Using AFS and passive scanning, the system will identify an unoccupied 20 MHz channel for use. Each linked SYNK Wireless System requires one 20 MHz channel. Systems that are separated by a large distance may use the same channel.

Note: The SYNK wireless system uses a proprietary transmission method, which cannot connect to or be accessed by 802.11 devices

In order to make sure that there are enough free channels for each SYNK System, follow the steps outlined below:

- 1. Contact your IT administrator to determine if 802.11a or 802.11n WiFi is in use at your facility. If so, note which channels are in use in or near each SYNK System installation location.
- 2. Determine if any 5.8 GHz cordless phones are in use at your facility. If so, note their locations.
- For each SYNK System installation location, ensure that there are two unused channels per SYNK Transmitter installed. If a 5.8 GHz cordless phone is used in the vicinity, assume that channels 149-165 are occupied.

Contact your Stryker sales representative for more details.

Linking the SYNK Wireless Transmitter to an Auxiliary Display

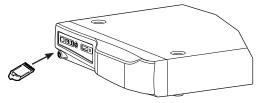
The SYNK Wireless Transmitter connects to the VisionPro SYNK 26" Wireless LED Display over a radio-frequency link.

Cautions

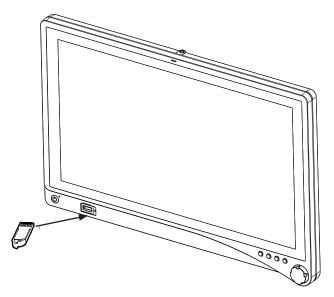
- Equipment that employs RF communications may affect the normal function of the transmitter. When choosing a location for the transmitter, consult the "Electromagnetic Compatibility" section of this manual to ensure proper function.
- In accordance with patient privacy laws, do not transmit personal patient information, such as EKG, EEG, patient name, or patient ID, over the wireless signal.

To link the display to the transmitter and thereby enable wireless communication, use the blue SYNK Wireless Transmitter token.

- Power on the transmitter and auxiliary display. The token LED shines amber as the devices perform startup functions.
- When the LED turns off, insert the blue token into the token slot on the transmitter. The token LED shines amber as it writes the data.



- 3. When the token LED is green, remove the token from the transmitter.
- 4. Within 2 minutes, insert the token into the token slot on the auxiliary display.
 - The token LED on the display shines green.
 - An audible tone sounds from the transmitter.
 - · The video feed appears on the auxillary display.



- 5. Remove the token from the token slot on the auxiliary display.
- By repeating steps 4 and 5, you can link as many as two additional auxiliary displays.Complete all linking within two minutes.
- 7. Store the token in the transmitter token slot when not in use.

Permanently Linking the Transmitter to an Auxiliary Display

A permanent link may be desirable in certain cases. Please contact your Stryker representative in order to permanently link the display(s) with a specific transmitter, as deemed appropriate. Once the display/transmitter set has been permanently linked, the set will automatically link when powered on. Keep display/transmitter sets that are in permanent link mode in the same operating room.

Removing the the Permanent Link

To return the display(s) and transmitter to default linking mode please follow the instructions below using the token.

- 1. Power on the display(s) and transmitter.
- 2. Insert the token into the transmitter and remove when the token LED turns green.
- 3. Power cycle the transmitter.
- 4. Insert the token into each display, one at a time, and remove the token when the token LED turns green.
- 5. Power cycle each display after removing the token.

Now the system can be linked as described in the default linking mode procedure.

Troubleshooting

Before returning your display or transmitter for service, consult the troubleshooting list below:

Problem	Current Status	Remedy
No picture	Power LED on	Using the OSD, adjust the brightness and contrast to maximum, or reset them to their default settings.
		Make sure the video cable is connected to the transmitter digital input or expansion slot input.
	Power LED off	Make sure that the power switch at the front and back of the display are set to ON.
		Make sure that the AC power cord is properly connected to the AC adapter and outlet.
		Make sure the power adapter is properly connected to the display.
	Power LED blinking	Check if the video signal cable is properly connected at the back of the display.
		Check if power is set to ON for the video signal source.
		Make sure the correct input is selected on the display and the transmitter.
Token LED blinking amb	per	Please contact Stryer representative.
Abnormal picture	Oversized, undersized, or missing display; or center shift.	Using the Screen Menu, adjust the Phase, Frequency, Horizontal, and Vertical settings with non-standard video signal timing.
		Wait a few seconds after initial sync of video signals, or power cycle the display.
OSD error message	"Video format not supported"	Ensure that an acceptable video source is connected. Refer to technical specifications for a list of acceptable video formats.
Wireless link not established within 2 minutes (with SYNK Wireless Transmitter).	"Wireless RGB No Signal"	Cycle the hard power switch at the rear of the display. Cycle the hard power switch at the front of the transmitter. Re-establish link.
Wireless link established with some but not all displays (with SYNK Wireless Transmitter).	"Wireless RGB No Signal"	Cycle the hard power switch on the affected display only. Re-insert token into display.

Problem	Current Status	Remedy
Wireless error symbol appears on the display.	Conditions are not sufficient for optimal wireless performance.	Switch to a wired video input on the display, or contact your Stryker representative.

Cleaning and Maintenance



Warning

To avoid electric shock and potentially fatal injury, unplug the transmitter from the electrical outlet before cleaning.

Caution

- Do not spray cleaning liquid directly onto the devices as product damage may result. Spray cleaning liquid on the cloth before wiping the devices.
- Do not immerse the devices in any liquid as product damage will result.
- Do not use corrosive cleaning solutions to clean the devices as product damage may result.
- Do not sterilize the devices as product damage may result.

Cleaning the Display and Transmitter

Display

Note: For complete display cleaning instructions, refer to the VisionPro 26" LED Display manual, P22286.

Transmitter

- Apply a standard disinfectant or mild detergent to a dry, sterile cloth. Do not saturate the cloth.
- 2. Wipe the device. Do not allow liquid to drip from the cloth or collect on the device.

Maintenance

Replacing the Fuses



Warning

To avoid the risk of fire, use only fuses of the value specified on the fuse label located on the rear panel of the transmitter.

- Unplug the power cord from the wall outlet and remove the cord from the transmitter console.
- Unlatch the fuse holder above the AC inlet and remove it. (You may need to press the tab on 2. the fuse holder with a slender screwdriver to release the latch.)
- Replace the fuse with the same value and rating. 3.
- Reinstall the fuse holder until the tab snaps in place.

Periodic Maintenance Schedule



Warning

To ensure safe operation of the transmitter you should periodically perform the following procedure:

Every 12 months, check the earth leakage current to <500μA, ground protective earth impedance to <0.1 ohms, and power consumption less than or equal to rated power. Use a true RMS digital multimeter and safety analyzer to perform this test.

Note: Refer calibration and operating difficulties not detailed in this manual to your Stryker Endoscopy sales representative.

Technical Specifications

SYNK Wireless Transmitter

Video Digital Input: One Digital Video Interface (DVI) Connector: 29-pin DVI-I Input/Output Output: One Digital Video Interface (DVI) Connector: 29-pin DVI-I

 Video
 1920 × 1080 @ 60 Hz

 Formats
 1920 × 1080 @ 50 Hz

1280 × 1024 @ 60 Hz 1280 × 1024 @ 50 Hz 1280 × 720 @ 60 Hz 1280 × 720 @ 50 Hz

Total 13.23 lbs (6.0 kg)

Shipping Weight

Transmitter 12.5 in W x 3.2 in H x 12.5 in D (31.8 cm W × 8.1 cm H × 38.1 cm D)

Console Dimensions

Wireless Frequency: 4.9 GHz – 5.9 GHz

Channel Bandwidth: 20 MHz

Channel Allocation: Automatic frequency selection with prescan

Protocol: Orthogonal Frequency Division

Multiplexing (OFDM) with Multiple Input Multiple Output (MIMO)

Wireless

Frequencies 5.15-5.825 GHz

of operation

Maximum 10 mW

Power Output

Channel 20 MHz

Bandwidth

Channel Automatic frequency selection with WiFi avoidance **Allocation**

Encoding Orthogonal Frequency Division Multiplexing with AES 256 bit

encryption

Antenna 5x4 MIMO

Note: The SYNK wireless system uses a proprietary transmission method, which cannot connect to or be accessed by 802.11 devices.

Electrical

Electrical 100 – 240VAC (600-250 mA) @ 50 – 60Hz

Input Ratings

Operating Conditions

Temperature

Temperature: 10 – 40°C (50 – 104°F)

Range

Relative

Relative Humidity: 25 - 75%

Humidity Range

Transport and Storage Conditions

Temperature

Temperature: -18 – 60°C (-0.4 – 140°F)

Range

Relative

Relative Humidity: 15 – 90%

Humidity Range

Classification and Approvals

Class I Medical Equipment

Medical equipment with respect to electric shock, fire, and mechanical hazards only in accordance with IEC 60601-1 and CAN/CSA C22.2 No. 60601-1

Continuous Operation

Compliance

FCC Regulations FCC 15B 2008 (Class B)

FCC Identifier (SYNK Wireless Transmitter): SSH-SYNKTX FCC Identifier (VisionPro SYNK 26" Wireless LED Display): SSH-

SYNKRX

IC: 4919C-SYNKTX (SYNK Wireless Transmitter)

IC: 4919C-SYNKRX (VisionPro SYNK 26"Wireless LED Display)

Please contact your local Stryker Endoscopy sales representative for information on changes and new products.

Electromagnetic Compatibility

Note: This equipment is for use in a professional healthcare environment. It is not for use in the RF shielded room of a medical electrical system for magnetic resonance imaging, where the intensity of EM disturbances is high.

Note: This equipment is not likely susceptible to interference from HF surgical instruments in the Special Environment of being in close proximity to an active HF surgical instrument. In the case that HF surgical interference is observed, adjust the separation distance of the equipment.



/ Warning

When this device is connected with other electrical equipment, leakage currents may be additive. To minimize total leakage current per patient, ensure that all systems are installed according to the requirements of IEC 60601-1.

Cautions

- Portable and mobile RF communications equipment may affect the normal function of the display.
- Do not use cables or accessories other than those provided with the display and transmitter, as this may result in increased electromagnetic emissions or decreased immunity to such emissions.
- If the display is used adjacent to or stacked with other equipment, observe and verify normal operation of the display and transmitter in the configuration in which it will be used prior to using it in a surgical procedure. Consult the tables below for guidance in placing the display and transmitter.

Like other electrical medical equipment, the VisionPro SYNK 26 " Wireless LED Display and SYNK Wireless Transmitter require special precautions to ensure electromagnetic compatibility with other electrical medical devices. To ensure electromagnetic compatibility (EMC), the display and transmitter must be installed and operated according to the EMC information provided in this manual. The display and transmitter have been designed and tested to comply with IEC 60601-1-2 requirements for EMC with other devices.

Guidance and Manufacturer's Declaration: Electromagnetic Emissions

The VisionPro SYNK 26"Wireless LED Display and SYNK Wireless Transmitter are intended for use in the electromagnetic environment specified below. The customer or the user of the VisionPro SYNK 26"Wireless LED Display and SYNK Wireless Transmitter should ensure they are used in such an environment.

Emissions test	Compliance	Electromagnetic Environment - guidance		
RF emissions CISPR 11	Group 1	The VisionPro SYNK 26"Wireless LED Display and SYNK Wireless Transmitter 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 VisionPro SYNK 26" Wireless LED Display and		
Harmonic emissions IEC61000-3-2	Class D	SYNK Wireless Transmitter is suitable for use in all establishments other than domestic establishments and those directly connected to the public low-voltage		
Voltage Fluctuations/ flicker emissions IEC61000-3-3	Complies	power supply network that supplies buildings used for domestic purposes, provided the following warning is heeded: Warning: This system is intended for use by health care professionals only. This system may cause radio interference or may disrupt the operation of nearby equipment. It may be necessary to take mitigation measures, such as reorienting or relocating the system or shielding the location.		

Guidance and Manufacturer's Declaration — Electromagnetic Immunity

The VisionPro SYNK 26" Wireless LED Display and SYNK Wireless Transmitter are intended for use in the electromagnetic environment specified below. The customer or the user of the VisionPro SYNK 26" Wireless LED Display and SYNK Wireless Transmitter should ensure that they are used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment Guidance
Electrostatic Discharge (ESD) IEC61000-4-2	±8kV contact ±15kV air	±8kV contact ±15kV 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 IEC61000-4-4	2kV for power supply lines 1kV for input/output lines (if applicable)	2kV line to ground 1kV line to line (if applicable)	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC61000-4-5	1kV differential mode 2kV common mode	1kV differential mode 2kV common mode	Mains power quality should be that of a typical commercial or hospital environment
Voltage dips, short interruptions and voltage variations on power supply input lines	0% <i>U</i> ₇ 0.5 cycle 0% <i>U</i> ₇ 1 cycle 70% <i>U</i> ₇ 25 cycles 0% <i>U</i> ₇ 5 sec.	0% U_7 0.5 cycle 0% U_7 1 cycle 70% U_7 25 cycles 0% U_7 5 sec.	Mains power quality should be that of a typical commercial or hospital environment. If the user of the transmitter requires continued operation during power mains interruptions, it is recommended that the Wireless Transmitter be powered from an uninterruptible power supply or a battery.
Power frequency (50/60Hz) 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: $U_{\rm T}$ is the AC mains voltage prior to application of the test level.

Guidance and Manufacturer's Declaration: Electromagnetic Immunity

The VisionPro SYNK 26"Wireless LED Display and SYNK Wireless Transmitter are intended for use in the electromagnetic environment specified below.

The customer or the user of the VisionPro SYNK 26"Wireless LED Display and SYNK Wireless Transmitter should ensure that they are used in such an environment.

Immunity Test	IEC 60601 Test level	Compliance Level	Electromagnetic Environment - guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the SYNK Wireless Transmitter system, including its cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
			Recommended Separation Distance
			d = 2√P 80 MHz to 2.7 GHz
Conducted RF IEC 61000-4-6	6 Vrms 150 kHz to 80 MHz	6 Vrms	where P is the maximum output power rating of th transmitter in watts (W) according to the transmitt
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2.7 GHz	3 V/m	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 equipmen marked with the following symbol:

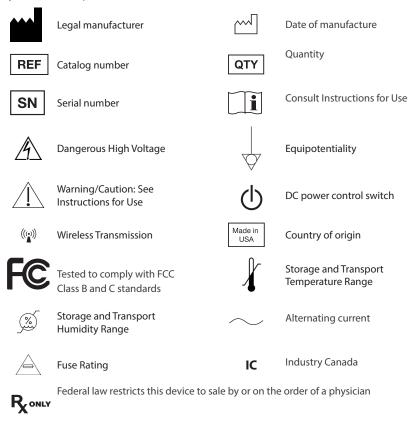
(a) Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcasts, and TV broadcast, cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the VisionPro SYNK 26"Wireless LED Display is used exceeds the applicable RF compliance level above, the display and transmitter should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the VisionPro SYNK 26"Wireless LED Display. (b) Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Test frequency (MHz)	Band (MHz)	Service	Modulation	Maximum power (W)	Distance (m)	Immunity test	
385	380-390	TETRA 400	Pulse modulation 18 Hz	1.8	0.3	27	
450	430-470	GMRS 460, FRS 460	FM ± 5 kHz deviation 1 kHz sine	2	0.3	28	
710			Pulse				
745	704 - 787	LTE Band 13, 17	modulation	0.2	0.3	9	
780		,	217 Hz				
810		GSM 800/900,					
870		TETRA 800,	Pulse				
930	800-960	800-960	iDEN 820, CDMA 850, LTE Band 5	modulation 18 Hz	2	0.3	28
1720 1845		GSM 1800;					
	-	CDMA 1900;	Pulse				
1970	1700-1990	GSM 1900; DECT; LTE Band 1, 3, 4, 25; UMTS	modulation 217 Hz	2	0.3	28	
2450	2400-2570	Bluetooth, WLAN, 802.11 b/g/n, RFID 2450, LTE Band 7	Pulse modulation 217 Hz	2	0.3	28	
5240			Pulse modulation	0.2	0.3	9	
5500	5100-5800	5100-5800 WLAN 802.11					
5785		G/11	217 Hz				

 $Note: Portable\ RF\ Communication\ equipment\ should\ be\ used\ no\ closer\ than\ 30cm\ to\ the\ SYNK\ Wireless\ System.\ Otherwise,\ degradation\ of\ the\ performance\ of\ this\ equipment\ could\ result.$

Symbol Definitions

The following symbols appear on the product, its labeling, or the product packaging. Each symbol carries a special definition, as defined below:





Transmitter: Medical Equipment is in accordance with AAMI Std. ES60601-1 and CSA C22.2 No. 60601-1 in regards to electric shock, fire hazards, and mechanical hazards.

stryker[®]



Stryker Endoscopy 5900 Optical Court San Jose, CA 95138 USA 1-408-754-2000, 1-800-624-4422 www.stryker.com

Products referenced with ™ designation are trademarks of Stryker.

Products referenced with ® designation are registered trademarks of Stryker.

P21693 G 2018/11