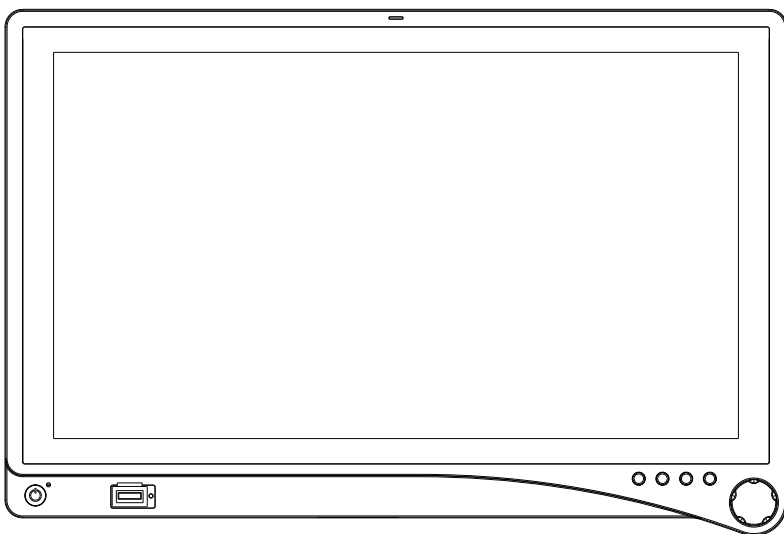


# stryker®

## VisionPro 26" LED Display

**REF** VisionPro 26" LED Display: 0240-031-020

SYNK VisionPro 26" Wireless LED Display: 0240-031-000



CE<sub>0197</sub> Rx ONLY

# Table of Contents

<b>Warnings and Cautions .....</b>	<b>1</b>
<b>About Your Device .....</b>	<b>3</b>
Intended Use .....	3
Indications .....	4
Contraindications.....	4
Package Contents .....	4
Device Features.....	5
<b>Setup.....</b>	<b>9</b>
Connections.....	9
Basic Video Setup.....	11
<b>Operation .....</b>	<b>12</b>
On-Screen Display (OSD).....	12
OSD Menus.....	13
Troubleshooting.....	15
<b>Cleaning and Maintenance.....</b>	<b>17</b>
Disposal .....	17
<b>Technical Specifications .....</b>	<b>18</b>
Display.....	18
<b>Symbols .....</b>	<b>23</b>

# 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.

## Warnings

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

1. Read this manual thoroughly and be familiar with its contents prior to using this device.
2. Federal law (United States of America) restricts this device to sale by, or on the order of, a physician.
3. Carefully unpack the device and check if any damage occurred during shipment.
4. This device is non-sterile and therefore should not be placed in the sterile field.
5. Do not place the device or any other heavy object on the power cord. Damage to the cable can cause fire or electric shock.
6. To avoid electric shock, avoid removing the bezel.
7. This device should not be used adjacent to or stacked with other devices. If adjacent or stacked use is necessary, the device should be observed to verify normal operation in the configuration in which it will be used.
8. Test this device prior to a surgical procedure. This device was fully tested at the factory before shipment.
9. Do not attempt internal repairs or adjustments not specifically detailed in this manual. Ensure that readjustments, modifications, and/or repairs are carried out by persons authorized by Stryker Endoscopy.
10. Do not put any liquid or solid object into the panel. If this occurs, unplug the device and have it checked by qualified personnel before operating it any further.
11. Use appropriate caution to prevent contact with fluids if the device is being used with a power supply in patient environments.
12. The use of cables and/or other accessories with this device, other than those specified, may result in increased emissions or decreased immunity of this device.

## Cautions

1. Connect the device to an AC adapter connected to a hospital grade power cord ensuring the power cord is plugged into a grounded power outlet to achieve grounding reliability.
2. Do not sterilize the device, as the delicate electronics cannot withstand this procedure.

3. Use only the proprietary surgical display power supply for the display. Completely secure the connection between the DC power cord and the extension cord.
4. Never operate the device immediately after transportation from a cold location to a warm location.
5. To connect to an international power supply, use an attachment plug appropriate for the power outlet, as outlined in the "Technical Specifications" section of this manual.
6. Unplug the device if it is not to be used for an extended period of time. To disconnect the cord, unscrew the plug first, then pull the cord out by the plug. Never pull the cord itself.
7. Do not expose the device to moisture or apply liquid cleaners directly to the screen. Spray the cleaning solution into a soft cloth and clean gently. For further detail, refer to the "Periodic Maintenance" section of this manual.
8. Allow adequate air circulation to prevent internal heat buildup. Do not place the device on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots. The device is cooled by natural convection and has no fan.
9. Do not touch the patient with signal input or output connectors. Equipment with SIP/SOP connectors should either comply with IEC 60601-1 and/or IEC 60601-1-1 harmonized national standards or the combination should be evaluated for safety.
10. To ensure electromagnetic compatibility, refer to the "Electromagnetic Compatibility" section of this manual. The device must be installed and operated according to the EMC information provided in this manual.
11. Pay close attention to the cleaning instructions in this manual. A deviation may cause damage.
12. Do not install the device near sunlight, excessive dust, mechanical vibration, or shock.
13. Do not operate with the glass device screen facing downward.
14. Handle the device with care. Do not strike or scratch the screen.
15. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

16. **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:**

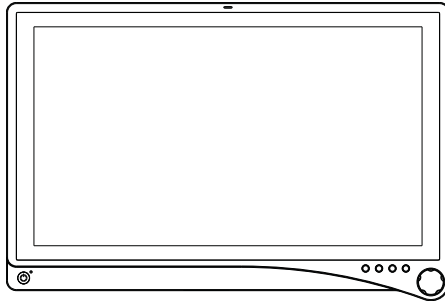
- Reorient or relocate the receiving device.
- Increase the separation distance between the device.
- Connect the device to an outlet on a circuit different from that to which the other device(s) are connected.
- Consult the manufacturer or field service technician for help.

To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# About Your Device

## VisionPro 26" LED Display

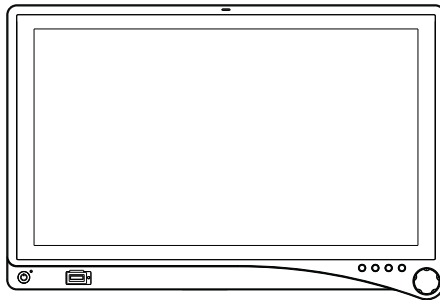
REF: 0240-031-020



The VisionPro 26" LED Display is a wide screen LED surgical display that can support a maximum resolution of WUXGA (1920x1200). The display supports various video inputs, including digital RGB, analog RGB, serial digital interface (SDI), component video (YPbPr/RGB), S-video, and C-video, and wireless RGB.

## SYNK VisionPro 26" Wireless LED Display

REF: 0240-031-000



The SYNK VisionPro 26" Wireless LED Display can be used with the optional SYNK Transmitter, which allows it to receive a high-definition video signal over a radio-frequency link. The wireless display supports a wireless RGB video input in addition to the video inputs supported by the VisionPro 26" LED Display.

For details and instructions on using the SYNK Transmitter and the wireless functionality of the SYNK VisionPro 26" Wireless LED Display, refer to the SYNK Wireless System manual (P21693)

## Intended Use

The SYNK VisionPro 26" Wireless LED Display and the VisionPro 26" LED Display are intended for video display during surgical procedures.

## Indications

This device is indicated for the following surgical procedures:

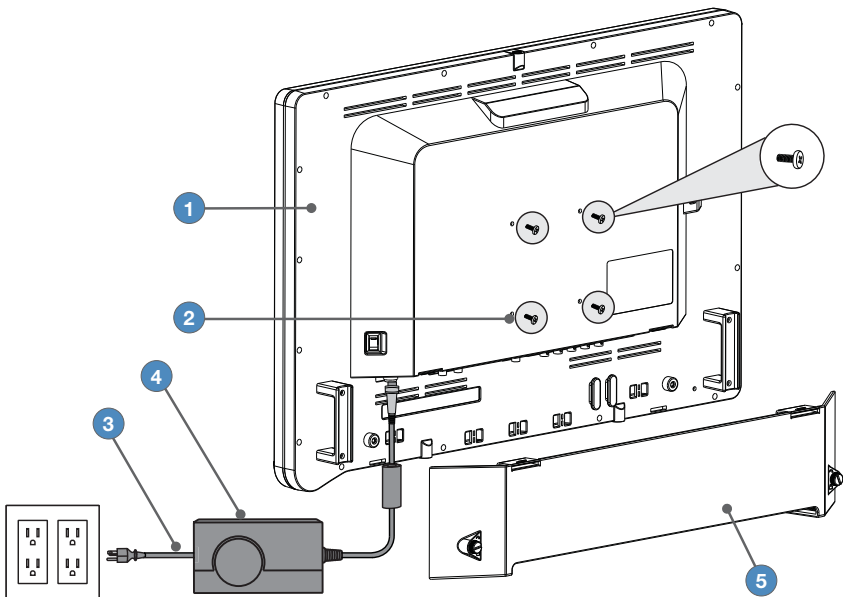
- Arthroscopy (orthopedic surgery)
- Laparoscopy (general and gynecological surgery)
- Thoracoscopy
- Endoscopy (general, gastroenterological and ENT)
- ENT
- Gynecology
- General surgery

The display is a non-sterile, reusable device not intended for use in the sterile field. The display is intended for use by qualified physicians having complete knowledge of these surgical procedures.

## Contraindications

There are no known contraindications for this device.

## Package Contents



### Package Contents

1. VisionPro 26" LED Display or SYNK VisionPro 26" Wireless LED Display
2. (4) M4 x 10 mm VESA screws

### Part Number

0240-031-020 ,0240-031-000

-

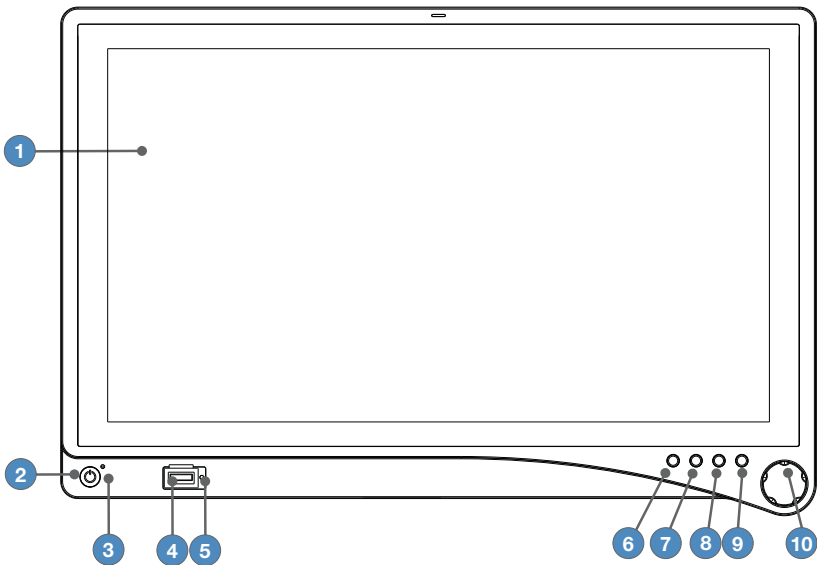
- |                                      |              |
|--------------------------------------|--------------|
| 3. Hospital-grade AC power cord      | -            |
| 4. VisionPro 26" Series Power Supply | 0240-031-004 |
| 5. Cable Cover                       | -            |

<b>Optional Accessories</b>	<b>Part Number</b>
SYNK Wireless Transmitter	0240-031-010
SYNK Wireless Receiver	0240-031-030
SYNK Display Media Bar	0240-031-003
SYNK 26" Display Cover	0240-031-002
Hospital-grade AC power cord	??
15-ft. (5 pin) DC extension cable	??
75-ft. (5 pin) DC extension cable	??

## Device Features

### Front panel

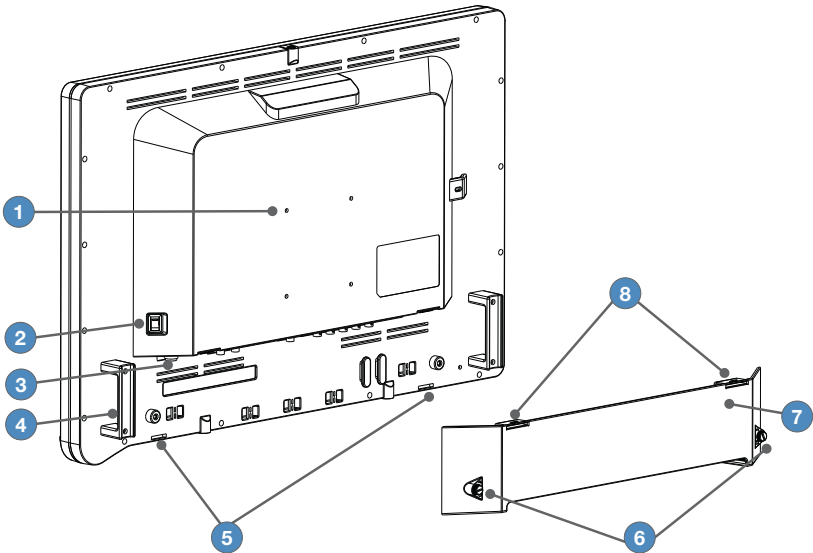
Operate the display using the rotary control located on the front panel. A list of the display controls and their functions is provided below.



- |                               |   |
|-------------------------------|---|
| 1. <b>Display Screen</b>      | Shows video image.  |
| 2. <b>Power switch (soft)</b> | Powers the display ON and OFF.  |
| 3. <b>Power LED</b>           | Indicates current status. Shines green if the display is powered on or is in screen saver mode; blinks red if the display is in standby mode; blinks amber if over voltage. |

- |     |  |   |
|-----|--|---|
| 4.  | <b>Token slot (SYNK VisionPro 26" Wireless LED Display only)</b> | Token insertion site used to establish a wireless connection with the transmitter.  |
| 5.  | <b>Token LED SYNK VisionPro 26" Wireless LED Display only)</b>   | Provides feedback when linking the display and transmitter.   |
| 6.  | <b>Audio/PIP</b>   | <b>VisionPro 26" LED Display:</b><br>Press once for the Picture in Picture adjustment menu.<br><b>SYNK VisionPro 26" Wireless LED Display:</b><br>Press once for the Audio adjustment menu (if optional Media Bar is installed).<br>Press twice for Picture in Picture adjustment menu. |
| 7.  | <b>Bright</b>  | Accesses the Brightness adjustment menu   |
| 8.  | <b>Specialty</b>   | Accesses the Specialty adjustment menu  |
| 9.  | <b>Input</b>   | Accesses the Input adjustment menu  |
| 10. | <b>Rotary control</b>  | Accesses the on-screen display and navigates through its functions.   |

## Rear panel

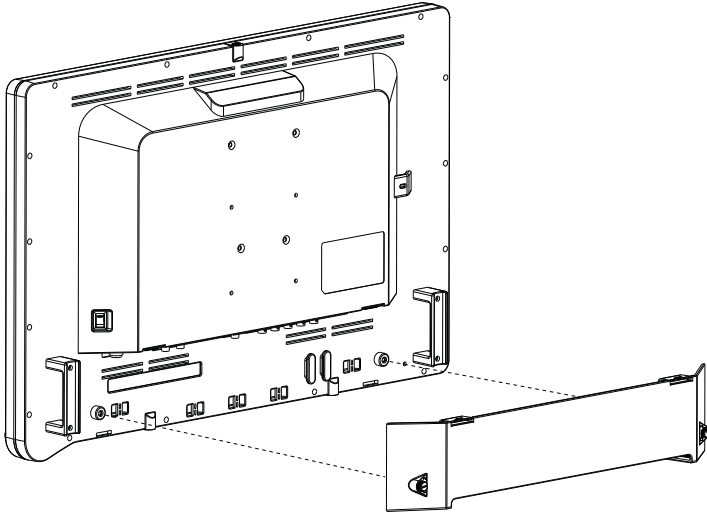


- |    |                                     |   |
|----|-------------------------------------|---|
| 1. | <b>VESA mounting holes (100 mm)</b> | Provide access points for mounting the display. |
| 2. | <b>Power switch (hard)</b>          | Powers the input DC power ON and OFF.           |
| 3. | <b>Power connector</b>              | Connects to the 24V DC power supply.            |



- 4. **Handles** Aid in display positioning.  
**Note:** The handles are not intended to bear the entire weight of the display
- 5. **Cable-management cover** Covers cables.

## Cable Cover



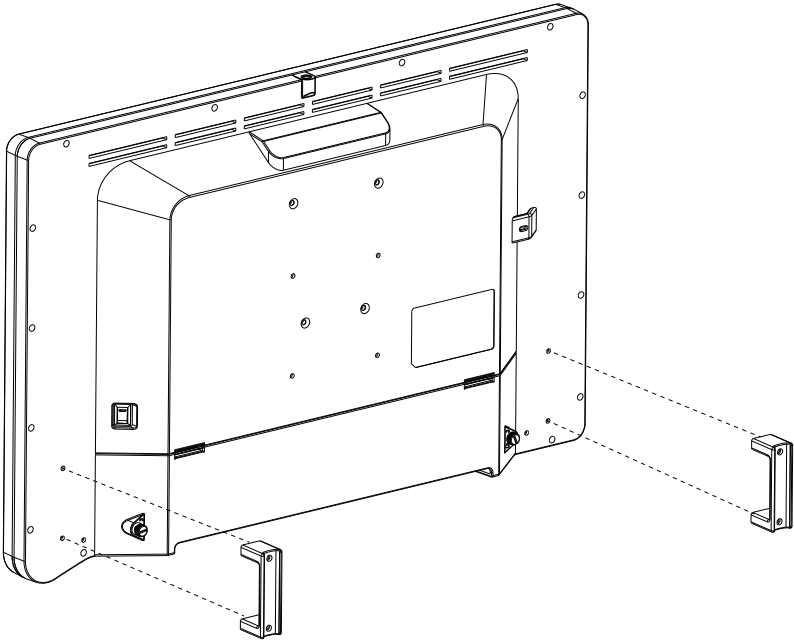
### Installing the Cable Cover

1. Align the left and right hinges of the cable cover onto the bottom rear of the display.
2. Snap on the top section of the cable cover to the aligning clips.
3. With your fingers, turn the thumbscrews clockwise to tighten and lock the cable cover onto the display.

### Removing the Cable Cover

1. With your fingers, turn the thumbscrews counterclockwise to loosen.
2. Once the thumbscrews are completely loosened, pinch the left and right clips and pull the cable cover towards you.
3. Remove the cable cover from the left and right hinges.

## Display Handles



**Note:** The handles are intended to aid in positioning the display, not for transporting the display. The handles should not bear the full weight of the display.

### Removing or Reinstalling the Display Handles

#### To Remove:

1. Using a Philips screwdriver, loosen the two **\*\*(insert size)\*\*** screws and gently pull the handle away from the display.

#### To Reinstall:

1. Align the handle with the screw holes on the rear of the display.
2. Using a Philips screwdriver, install the two **\*\*(insert size)\*\*** screws to attach the handle.
3. To remove the handles, loosen the screws with a Philips screwdriver and gently pull the handle away from the display.

# Setup

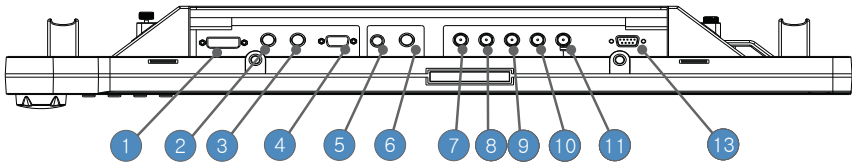
Stryker Endoscopy considers instructional training, or inservice, an integral part of this device. Your local Stryker Endoscopy sales representative will perform at least one inservice at your convenience to help set up your device and instruct you and your staff on its operation and maintenance. To schedule an inservice, contact your local Stryker Endoscopy representative after your device has arrived.

## Connections

### Connection Ports

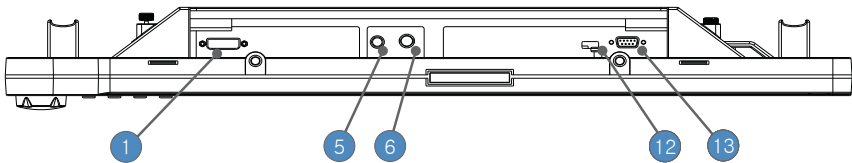
Video input signals are connected to the rear of the display, as illustrated below:

VisionPro 26" LED Display

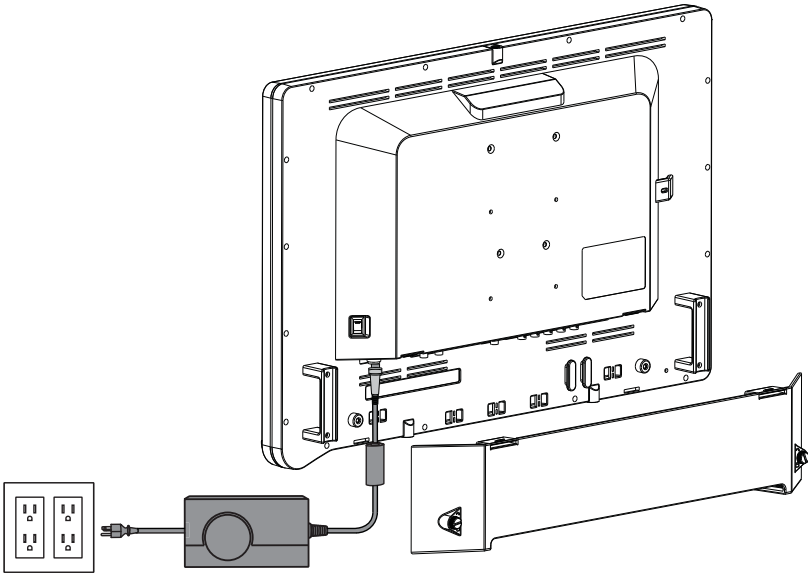


- |                        |            |
|------------------------|------------|
| 1. DVI                 | 8. G/Y     |
| 2. 3G/HD/SD<br>SDI-in  | 9. B/Pb    |
| 3. 3G/HD/SD<br>SDI-out | 10. H-sync |
| 4. VGA                 | 11. V-sync |
| 5. S-Video             | 12. Option |
| 6. C-Video/SOG         | 13. RS232  |
| 7. R/Pr                |            |

SYNK VisionPro 26" Wireless LED Display



## Connecting the VisionPro 26" LED Display Power Supply



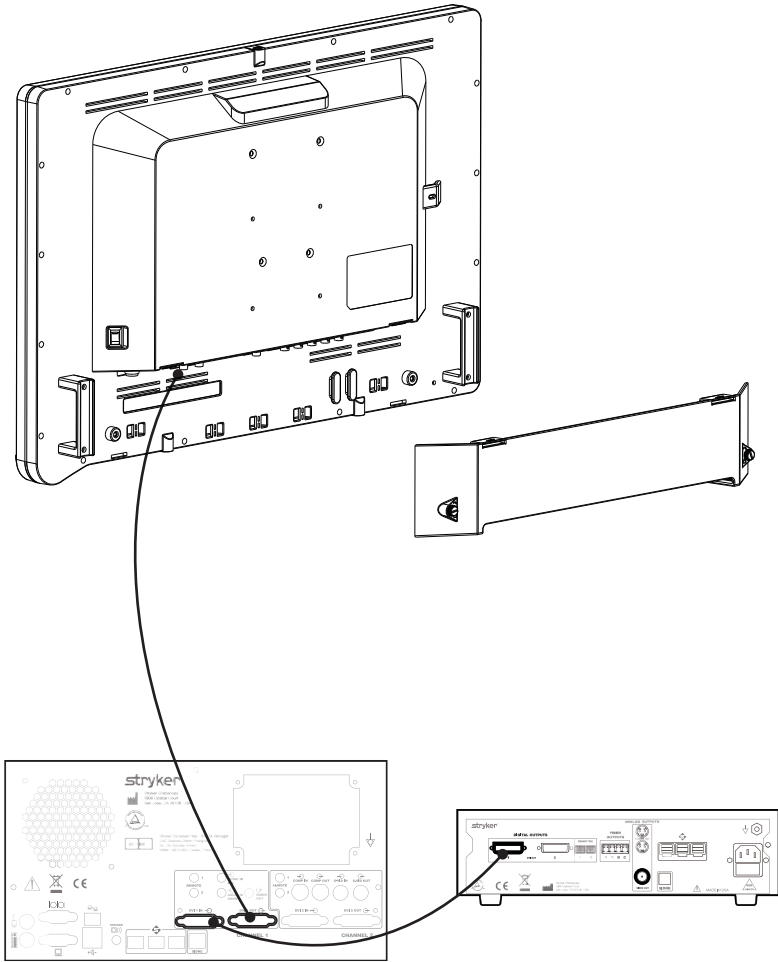
1. Connect the power supply to the 24V input on the display.
2. Connect the AC power cord to the power supply\*.
3. Connect the AC power, using the supplied hospital-grade power cord.
4. (Optional, not shown) Connect an extension cord between the power supply and display.
5. Install cable cover.

\* **Power supply**

**Model Number:** BPM150S24F11

**Manufacturer:** Bridgepower Corp.

## Basic Video Setup



1. Remove the cover from the cables on the rear of the display.
2. Route the video output 1 from the camera to the SDC DVI input.
3. Route the video output 1 from the SDC DVI output to the DVI input on the display.
4. Reinstall the cable cover.

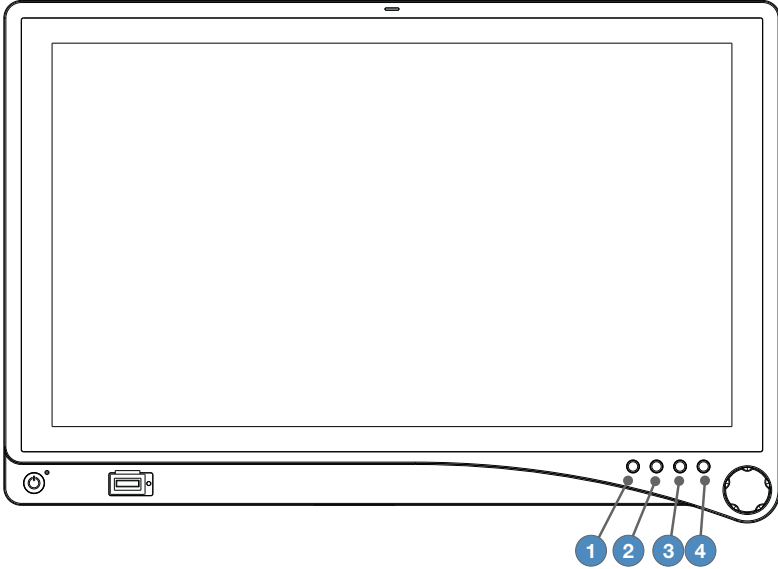
# Operation

Operate the display using the rotary control and the four buttons located on the front panel. A list of the display controls and their functions is provided below.

## On-Screen Display (OSD)

### Accessing the On-Screen Display

To use the four front-panel buttons:



1. Audio/PIP: Press once to activate the Audio menu (if optional Media Bar is installed), Press twice to activate Picture Mode (Picture in Picture, Picture by Picture, Picture on Picture)
  - a. Use the Rotary Control to navigate the menus once they are activated
2. Bright: Activates the Brightness adjustment menu.
3. Specialty: Activates the Specialty adjustment menu.
4. Input: Activates the Input adjustment menu.

To use the **Rotary Control**:

- **Turn Right/Left** — With the on-screen display menu activated, turning increases/decreases the value of the selected parameter.
- **Push** — Accesses/selects on-screen display menu.
- **Push and Hold** — Exits on-screen display menu.

### Operating On-Screen Display

The device OSD helps navigate through various device menus.

1. Press the **Rotary Control** to activate the OSD menu.
2. Rotate the **Rotary Control** to move up or down through the menu.  
The parameter will be highlighted when selected.
3. Press the **Rotary Control** to enter the next level OSD.
4. Rotate the **Rotary Control** to increase or decrease the value of the selected parameter, or to make a selection on different options.
5. To exit the OSD menu screen from the second — or third — level OSD menu, select the Exit option. To completely exit the OSD, press and hold the **Rotary Control**. If no keys are pressed, the OSD will automatically exit after the factory-set predetermined time (the time is customizable).

## OSD Menus

### Speciality

Menu Item	Description	Range
<b>Color Temperature*</b>	Chooses between color temperatures for Lap A, Lap B, Standard, Arthro, PACS, NORM, ENT, GYN.	—
<b>Red</b>	Red balance	-128 – 127
<b>Green</b>	Green balance	-128 – 127
<b>Blue</b>	Blue balance	-128 – 127
<b>Gamma</b>	Gamma value	0.1 – 2.5, S0, S1, S2

### Audio (Available when the Media Bar is installed)

Menu Item	Description	Range
<b>Speaker Volume</b>	Increases or decreases the speaker volume	0-100
<b>Speaker Mute</b>	Enables or disables speaker sound	—
<b>Mic Volume</b>	Increases or decreases the microphone volume	0-100
<b>Mic Mute</b>	Enables or disables microphone	—
<b>Speaker EQ Enable</b>	Enables or disables the speaker equalization adjustment	—

## Setting

Menu Item	Description	Range
<b>Brightness</b>	Increases or decreases the brightness	0 – 100
<b>Contrast</b>	Increases or decreases the contrast	0 – 100
<b>Phase**</b>	Increases or decreases the Phase level	0 – 100
<b>Chroma**</b>	Increases or decreases the Chroma level	0 – 100
<b>Image Sharpness</b>	Sets image sharpness	1 – 10
<b>Video Sharpness**</b>	Increases or decreases the video sharpness	0 – 100

\* Color Temperature RGB adjustment is available only for Standard, Arth, and Lap settings. PACS and Norm adjustments are only available under SOG input.

\*\* Only available under SDI-, S-, or C-video input.

## Image Effect

Menu Item	Description
<b>Scale Mode</b>	Chooses scale mode between Fill All, V-Fill, H-Fill, One-To-One, or Fill-Aspect
<b>Freeze Frame</b>	Enables or disables freeze frame
<b>PIP</b>	Enables PIP (picture in picture) function
<b>POP</b>	Enables POP (picture on picture) function
<b>PBP</b>	Enables PBP (picture by picture) function

## Advanced

Menu Item	Description
<b>Key Lock</b>	Sets to key lock mode
<b>Auto Source Select</b>	Adjusts Auto Source Select between on and off
<b>DPMS</b>	Chooses DPMS (display power management signaling)
	OFF, 30, 60, 90, or 120min



Menu Item	Description
<b>OSD Control</b>	Controls OSD Menu Position, Background, and Time out
<b>Restore Factory Settings</b>	Sets to factory default
<b>Screen Control***</b>	Controls and adjusts Horizontal, Vertical, Frequency, and Phase

\*\*\* Only available under analog inputs under certain respective inputs.

### SYNK (for the SYNK VisionPro 26" Wireless LED Display)

Status	Description
RX MAC: XXXXXXXX RX SW: vXX.XX.XX	Receiver
TX MAC: XXXXXXXX TX SW: vXX.XX.XX SIGNAL: Excellent, Good, Poor REGIONAL SETTING: XXXXXXXX CHANNEL XXXX MHz	Transmitter

### Information

Menu Item	Description
<b>User Name Entry</b>	Enters custom user name display for boot-up display
<b>Serial Number</b>	Displays device serial number
<b>Runtime</b>	Displays current device total run time
<b>Input Format</b>	Displays current input format

**Note:** Actual on-screen display values may vary with updated versions of the firmware and user settings.

## Troubleshooting

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

<b>Problem</b>	<b>Current Status</b>	<b>Remedy</b>
No picture	Power LED on	Using the OSD Menu, adjust the brightness and contrast to maximum, or reset them to their default settings.
	Power LED off	Ensure the power switch at the front and rear of the display are set to ON.
		Check if the AC power cord is properly connected to the AC adapter and outlet.
	Power LED blinking	Check if the video signal cable is properly connected at the back of the display.
Check if power of the video signal source system is ON.		
Abnormal picture	Oversized, undersized, or missing display; or center shift.	Using the Screen Control Menu, adjust the Phase, Frequency, Horizontal, and Vertical settings in order to correct the display image.
		Wait a few seconds after initial sync of video signals, or power cycle the display.
OSD error message	"Out of Range"	Ensure that an acceptable video source is connected. Refer to the "Technical Specifications" section of this manual for a list of acceptable video formats.

# Cleaning and Maintenance

## Warning

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

## Caution

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

## Cleaning

Should the unit need cleaning:

1. Spray cleaning liquid onto a dry, sterile cloth. Avoid excess liquid or drips.
2. Wipe the unit.
3. Take extra care when cleaning the screen. Excess liquid or drips that enter the bottom of the screen may result in product damage.

## Disposal



This product contains electrical waste or electronic equipment. It must not be disposed of as unsorted municipal waste and must be collected separately in accordance with applicable national or institutional related policies relating to obsolete electronic equipment.

Dispose of any system accessories according to normal institutional practice relating to potentially contaminated items.

# Technical Specifications

## Display

LCD Display Panel	26" (661 mm) Diagonal (a-Si TFT active matrix LCD)
Synchronization	2.5 – 5.0 Vpp separated sync
Pixel Pitch	0.300 (H) x 0.300 (V) mm
Response Time	< 18 ms Typ
Viewing Angle	Right/Left/Up/Down 89 Degrees
Display Colors	1 billion colors (10 bit)
Native Resolution	1920 (H) dots x 1080 (V) lines
Input Signal	1 DVI, 1 VGA, 3G/HD/SD-SDI, 1 C-Video/SOG, 1 S-Video, 1 Component (Y/G, Pb/B, Pr/R, H, VS), 1 Wireless
Maximum Pixel Clock	165 MHz

## Electrical

Power Adapter	Input: 100 – 240 VAC; 50 – 60 Hz; 2.5 A Output: 24V; 6.25 A <b>Model Number: BPM150S24F11</b>
Power Consumption	150 W (max)
Current	Direct

## Current/Voltage Rating

Please ensure the respective power cord complies with applicable local regulations and standards.

110V +/- 10V power outlets	Select a power supply cord that is UL Listed and C.S.A Certified, type SJT or SVT, 3 – conductor, 18AWG, terminated in a molded on hospital grade plug cap rated 110V +/- 10V, 15A, with a minimum length of six feet.
220V +/- 20V power outlets	Select a power supply cord that is internationally harmonized and marked "<HAR>"; 3 – conductor, 0.75 mm <sup>2</sup> minimum wire, rated 220V +/- 20V, 10A with a PVC insulated jacket. The cord must have a molded on plug cap rated 220V +/- 20V, 10A. The cord and plug cap must be suitable for medical use.

## Dimensions

Dimensions (W x H x D)	660.4 x 442 x 86.4 mm 26 x 17.4 x 3.4 in
Weight (approximate)	8.6 kg; 19 lbs.
VESA Mounting Interface	VESA 100 x 100 mm

## Operating Conditions

Operating Temperature	41 – 104°F (5 – 40°C)
Relative Humidity	30 – 95%
Electrical Input Rating	24V DC 6.92A

**Transport & Storage Conditions**

Storage	-0.4 – 140°F (-18 – 60°C)
Relative Humidity Range	15 – 90%

**Classification and Approvals**

- Class I Equipment
- Medical equipment with respect to electric shock, fire, and mechanical hazards only in accordance with UL 60601-1 and CAN/CSA C22.2 No. 601.1.
- IP23 Water Ingress Protection
- Continuous Operation


**Compliance**

FCC Regulations	<p>SYNK VisionPro 26" Wireless LED Display</p> <p>FCC Part 15 Class B</p> <p>FCC Identifier: QVXAMM261WTDSW</p> <p>FCC Part 15 Class C</p> <p>FCC Identifier: SSH-SYNKRX (wireless module)</p> <p>FCC Identifier: N6C-SDMAN (WiFi module)</p> <p>VisionPro 26" LED Display</p> <p>FCC Part 15 Class B</p> <p>FCC Identifier: QVXAMM261WTDS</p>
IC Regulations	<p>IC: 4919C-0240031000 (SYNK VisionPro 26" Wireless LED Display)</p>

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

**Electromagnetic Compatibility**

Like other electrical medical equipment, the VisionPro 26" LED Display requires special precautions to ensure electromagnetic compatibility with other electrical medical devices. To ensure electromagnetic compatibility (EMC), the display must be installed and operated according to the EMC information provided in this manual. The display has been designed and tested to comply with IEC 60601-1-2:2001 requirements for EMC with other devices.


 <p>Warning</p>	<p>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 60601-1-1.</p>
<p>Caution</p>	<p>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, as this may result in increased electromagnetic emissions or decreased immunity to such emissions.</p> <p>If the display is used adjacent to or stacked with other equipment, observe and verify normal operation of the display 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.</p>

Guidance and Manufacturer's Declaration: Electromagnetic Emissions		
The VisionPro 26" LED Display is intended for use in the electromagnetic environment specified below. The customer or the user of the display should ensure it is used in such an environment.		
Emissions test	Compliance	Electromagnetic Environment - guidance
RF emissions CISPR 11	Group 1	The VisionPro 26" LED Display 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 26" LED Display is suitable for use in all establishments other than domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes, 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.
Harmonic emissions IEC61000-3-2	Class D	
Voltage Fluctuations/ flicker emissions IEC61000-3-3	Complies	

Guidance and Manufacturer's Declaration — Electromagnetic Immunity			
The VisionPro 26" LED Display is intended for use in the electromagnetic environment specified below. The customer or the user of the display should ensure that it is used in such an environment.			
Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment—Guidance
Electrostatic Discharge (ESD) IEC61000-4-2	6kV contact 8kV air	6kV contact 8kV 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	2kV line to ground 1kV line to line	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  IEC61000-4-11	<ul style="list-style-type: none"> <li>• &lt;5% Ut (&gt;95% dip in Ut) for 0.5 cycle</li> <li>• 40% Ut (60% dip in Ut) for 5 cycles</li> <li>• 70% Ut (30% dip in Ut) for 25 cycles</li> <li>• &lt;5% Ut (&gt;95% dip in Ut) for 5 sec.</li> </ul>	<ul style="list-style-type: none"> <li>• &lt;5% Ut (&gt;95% dip in Ut) for 0.5 cycle</li> <li>• 40% Ut (60% dip in Ut) for 5 cycles</li> <li>• 70% Ut (30% dip in Ut) for 25 cycles</li> <li>• &lt;5% Ut (&gt;95% dip in Ut) for 5 sec</li> </ul>	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	3.0 A/m	3.0 A/m	Power-frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
<b>Note:</b> Ut is the AC mains voltage prior to application of the test level.			

**Guidance and Manufacturer's Declaration: Electromagnetic Immunity**

The VisionPro 26" LED Display is intended for use in the electromagnetic environment specified below. The customer or the user of the display should ensure 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 Vrms 150 kHz to 80 MHz	3 V	Portable and mobile RF communications equipment should be used no closer to any part of the VisionPro 26" LED Display, including its cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended Separation Distance: $d = 1.17/\sqrt{P}$ $d = 1.17/\sqrt{P}$ 80 MHz to 800 MHz $d = 2.33/\sqrt{P}$ 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). 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: 
Radiated RF IEC 61000-4-3	3 V/m 80MHz to 2.5 GHz	3 V/m	

NOTE 1: At 80 MHz and 800 MHz, 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.

(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 VisionPro 26" 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 26" LED Display.

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

**Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and the VisionPro 26" LED Display**

The VisionPro 26" LED Display is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The user of the VisionPro 26" LED Display can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the VisionPro 26" LED Display as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power (W) of transmitter	Separation distance (m) according to frequency of transmitter		
	150 kHz to 80 MHz $d = 1.17/\sqrt{P}$	80 kHz to 800 MHz $d = 1.17/\sqrt{P}$	800 kHz to 2.5 GHz $d = 1.17/\sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.17	1.17	2.33
10	3.70	3.70	7.37
100	11.70	11.70	23.30

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 800 MHz, the separation distance for the higher frequency range applies.

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



# Symbols

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



Direct Current



Do Not Get Device Wet



Maximum Stacking



Wireless Transmission



Tested to comply with FCC Class B standards



Operating Humidity Ratings

Medical Equipment is in accordance with UL 60601-1 and CAN/CSA C22.2 No. 601.1 in regards to electric shock, fire hazards, and mechanical hazards.



IC

Industrial Canada



No Serviceable Parts



Consult instructions for use



Date of Manufacture



Japan PSE Mark Denan



Efficiency Level



For Indoor Use Only



DC Power Control Switch



This Side Up



Fragile

IP23

Degrees of protection against the ingress of water



Operating Temperature Ratings



This symbol indicates that this product is compliant to applicable standards and is suitable for the Australian market.

MADE IN KOREA

Made in Korea



Warning/Caution: See Instructions for Use



Catalog number



Legal manufacturer



UL Functional Safety Recognized Component

This product contains waste electrical or electronic equipment. It must not be disposed of as unsorted municipal waste and must be collected separately.



Federal law restricts this device to sale by or on the order of a physician

**stryker**<sup>®</sup>



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