



CystoView Monitor

Operations & Maintenance Manual

CystoView Monitor

Operations & Maintenance Manual

Effective: 7 May 2026

Caution: Federal (United States) law restricts this device to sale by or on the order of a physician.

Contact Information

To obtain additional information regarding your system,
please contact Verathon Customer Care or visit verathon.com/service-and-support.

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Information in this manual may change at any time without notice. For the most up-to-date information, see the documentation available at verathon.com/service-and-support.

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Important Information

Product Description

CystoView is an all-in-one system offering immediate access to the tools you need for endoscopic access to the lower urinary tract, and examination of it. Designed around a 15" high-definition touchscreen monitor and comprehensive workstation, CystoView delivers elevated visibility and improved workflow.

For more information on compatible scopes, please see the *CFlex Single-Use Cystoscopes Operations & Maintenance Manual* (part number 0900-5276), available at verathon.com/service-and-support.

Statement of Intended Use

The CystoView monitor is intended to display live imaging data from compatible Verathon visualization devices.

Indications for Use

As the CystoView monitor is intended to display live imaging data from compatible Verathon visualization devices, the intended medical indication will be defined by the connected visualization devices.

Statement of Prescription

The system should be used only by individuals who have been trained and authorized by a physician or used by healthcare providers who have been trained and authorized by the institution providing patient care.

Intended Use Environment & User Population

The CFlex Single-Use Cystoscope system is intended to be used by qualified healthcare providers in professional healthcare environments such as urology clinics, ambulatory surgical centers, or hospitals.

Contraindications

There are no known contraindications for the CystoView monitor.

HIPAA Privacy

The Health Insurance Portability and Accountability Act of 1996 ("HIPAA") regulations require our customers to monitor and limit the ways in which patients' confidential information is accessed, utilized, stored, transmitted, and disposed. Our customers are ultimately responsible for ensuring all electronic health information contained within the system is protected. In the course of providing the services to customers, Verathon will remove all electronic protected health information from the system if present.

Notice to All Users

Verathon recommends that all users do the following:

- Read the manual before using the equipment.
- Obtain instruction from a qualified individual.
- Practice using the cystoscope on a manikin before clinical use.

Warnings

Warnings indicate that injury, death, or other serious adverse reactions may result from use or misuse of the device.

Warnings: Use



WARNING

Verathon has conducted no analysis to establish the compatibility of the system with environments where magnetic resonance imaging (MRI) equipment is installed. Because of this, the owner of the system must exclude it from any magnetic resonance (MR) environment.



WARNING

The video signals produced and used by this system are intended for device positioning only. Do not use the system as the sole diagnostic method of any pathology.

Warnings: Reprocessing



WARNING

This product may only be cleaned or disinfected by using the approved processes provided in the Airway Management & Urologic Endoscopy Products Reprocessing Manual (part number 0900-5032). Cleaning and disinfection methods listed are recommended by Verathon based on efficacy or compatibility with component materials.

Warnings: Electrical



WARNING

To maintain electrical safety, use only the provided power supply. Connect the power cord and power adapter to a properly grounded plug, and ensure that the disconnect is easily accessible. Use only the accessories and peripherals recommended by Verathon.

**WARNING**

Electric shock hazard. Do not attempt to open the system components. This may cause serious injury to the operator or damage to the instrument and voids the warranty. Contact Verathon Customer Care for all servicing needs.

**WARNING**

Use of accessories and cables other than those specified or provided by Verathon may cause this system to experience electromagnetic malfunctions, including increased emissions or decreased immunity. This may cause improper operation, procedure delays, or both.

**WARNING**

Portable radio frequency communications equipment (including peripherals such as antenna cables and external antennas) may not be used within 30 cm (12 inches) of any part of the CystoView system, including cables that Verathon specifies or provides for use with the system. If this distance is not maintained, performance of the system may be degraded and image display may be compromised.

**WARNING**

Do not use the CystoView system adjacent to or stacked with other equipment. Such positioning may cause the system to function improperly.

Warnings: Disposal

**WARNING**

This instrument and related devices may contain batteries or other environmentally hazardous materials. When the instrument or accessories have reached the end of their useful service life, see the section Device Disposal. Dispose of used, single-use components as infectious waste.

Introduction

CystoView






The monitor is compatible with CFlex Single-Use Cystoscopes, which this manual refers to as *scopes*.

The monitor uses scopes and connecting cables, along with optional system components to help facilitate cystoscopy or provide convenience to the user.

This manual details how to use the monitor and provides limited information on how to connect scopes. For more information on compatible scopes, refer to the *CFlex Single-Use Cystoscope Operations & Maintenance Manual* (part number 0900-5276) available at verathon.com/service-and-support.

System Parts & Accessories





Table 1. Required System Components

REQUIRED PARTS & ACCESSORIES		
CystoView monitor 		
12 V DC power adapter 	Power cable 	2m QuickConnect cable* 
One or more of the following scope styles:		
CFlex Single-Use Cystoscope† 		

* Cable shortened for illustration purposes.

† For a full list of compatible video scopes, please see the *CFlex Single-Use Cystoscopes Operations & Maintenance Manual* (part number 0900-5276).

Table 2. Optional System Components

OPTIONAL PARTS & ACCESSORIES	
<p>Workstation (0800-0700) with IV Pole Kit (0810-0304)</p> 	<p>IV pole clamp (0810-0287)</p> 
	<p>Media storage USB</p> 
	<p>Operations & Maintenance Manual USB</p> 
















Buttons, Icons, & Connections

The digital, full-color CystoView monitor clearly displays the images transmitted from the camera in the scope. The front of the monitor includes the button for power and the touchscreen.

























The back panel of the monitor includes sockets and ports for connecting the power cord, video cable, USB flash drives, and an HDMI cable for an external video display. When the USB and HDMI ports are not in use, it is recommended that the rubber cover be used to protect the openings from dust and other contamination. The back of the monitor also features VESA mounting holes that allow you to attach the monitor to a compatible mount.

The following tables provide general information regarding the buttons and icons on the monitor.

Table 3. Monitor Buttons

BUTTON GROUP	BUTTON	FUNCTION
Front panel		Power: This is a physical button located on the bottom left corner of the display. Press and release to turn on the monitor. Press and hold to turn it off. Note: If the monitor locks up or becomes unresponsive for any reason, press and hold the Power button for 7 seconds to turn off the system.
Home screen (left side)—media buttons and main menu		Record (toggle)*: Records all visible video feeds. While recording, and depending on the recording status and mode, the record button's icon will change to one of the following:  Video is recording. Press to end recording.  Video is recording with audio. Press to end recording.  Video recording error.  Video with audio recording error.
		Snapshot button: Takes a photo of the video feed(s). If there is an error, the icon changes to include an Attention symbol: 
		Note editor button: Launches Note Editor. If there is an error, the icon changes to include an Attention symbol: 
		Main Menu: Reveals the Main Menu flyout containing the Gallery and Settings buttons.
Status bar		Favorites filter: Toggles the favorites filter. When the filter is turned on, the star and toggle will change from gray to amber.
		Sort by date (Gallery): Select the up arrow  for ascending order or down arrow for descending  order.

* Video recording is disabled while connected to an external monitor.

BUTTON GROUP	BUTTON	FUNCTION
Main Menu Flyout		Gallery: Launches Gallery page. If there is an error, the icon changes to include an Attention symbol: 
		Settings: Launches Settings page.
Settings menu		Features: Displays the Feature Settings page.
		Regional Settings: Displays the Regional Settings page.
		Administrative Settings: Displays the Admin Settings page.
Toggle switches		Switch in the off position.
		Switch in the on position.
Home screen (right side)— Video layout menus		Move Left: Moves the video window to the left side.
		Move Right: Moves the video window to the right side.
		Close: Closes the video window, dialog, or editor.
		Brightness: Opens and closes the brightness controls. 
		Contrast: Opens and closes the contrast controls. 
Gallery		Export: Exports selected file.
		Star: Adds or removes 'favorite' status to selected file.
		Delete: Deletes selected file.
		Back: Returns to previous screen.
		Select All: When viewing files in the Gallery, check this box to select all files in the row.
		Note Thumbnail: Indicates the file is a patient note. Tap to open the patient note viewer.
		Video Thumbnail: Indicates the file is a video. Select to open the video player.
		Expand: Expands the video to fill the screen.
	Standard View: Returns the video to its normal size.	







































BUTTON GROUP	BUTTON	FUNCTION
Note editor		Save: Saves editor changes.
		Close: Closes editor.
		Backspace button: Deletes previous digit
		Reveal Text: Reveals masked characters
Media Export		Copy: After tapping the Export button, select this option to copy the selected files to the USB drive. This leaves a copy in the internal memory.
		Move: After tapping the Export button, select this option to move the selected files to the USB drive. This removes the copy from the internal memory unless the file is marked as a favorite.
Gallery— video player		Restart: Rewinds selected video to beginning.
		Rewind: Rewinds selected video by 20% of the video's duration.
		Play Video: Plays selected video. Changes to pause button while video is playing.
		Pause Video: Pauses the playing video. Changes to play button while video is paused.
		Fast Forward: Skips selected video by 20% of the video's duration.
		Volume (toggle): Toggles volume buttons and meter.
		Volume Up: Turns the volume up.
		Volume Down: Turns the volume down.
		Mute: Mutes the volume. When muted, also un-mutes the volume.
		Playhead: Shows the current location in the video. Can be dragged horizontally to jump to a specific location in the video.
Dialog Box		Yes: Answers Yes or okay.
		No: Answers No or cancels.

Table 4. On-Screen Icons

ICON	FUNCTION
	Battery Status: Indicates the remaining battery power. See Charge the Monitor Battery on page 14 for more information.
	Favorite: Displays above Gallery files that have been selected as favorites.
	Power-Down Countdown: The unit is about to turn off. If this is due to the Auto Shutdown feature, touch the screen to cancel the shutdown. Note: The Auto Shutdown feature can be adjusted or disabled on the Feature Settings screen. For more information, see Feature Settings Tab on page 15.
	Storage—Internal Memory: Displays available internal memory.
	Storage—USB Drive: Displays available USB memory. Shows when a USB drive is attached.
	Attention: Indicates important text.
	USB Drive Detected: Indicates a USB flash drive is attached to the monitor and detected.
	Hourglass: Advises the operator to wait while the system shuts down.
	Patient name field: Indicates the patient name text entry field.
	Clinician name field: Indicates the clinician name text entry field.
	Device Name: Indicates the device name text entry field.
	Recording options: Indicates settings for video and audio recording.
	System Sounds: Indicates settings for system sounds.
	Time zone and daylight savings: Indicates settings for the time zone and daylight savings time.
	Security Code options: Indicates settings for system security code.
	Video Timestamps: Indicates settings for video timestamps.
	Snapshot Timestamps: Indicates settings for snapshot timestamps
	Date options: Indicates settings for the system date.
	Time Editor: Icon for the time editor.
	Charging indicator: Appears when the monitor is connected to the power adapter.




ICON	FUNCTION
	Auto-Shutdown: Indicates settings for Auto-Shutdown.
	Note Field options: Indicates settings for note fields.
	Reset Settings: Indicates option to reset system settings to factory default.

Figure 1. CystoView Monitor Front Panel



Figure 2. CystoView Monitor Back Panel

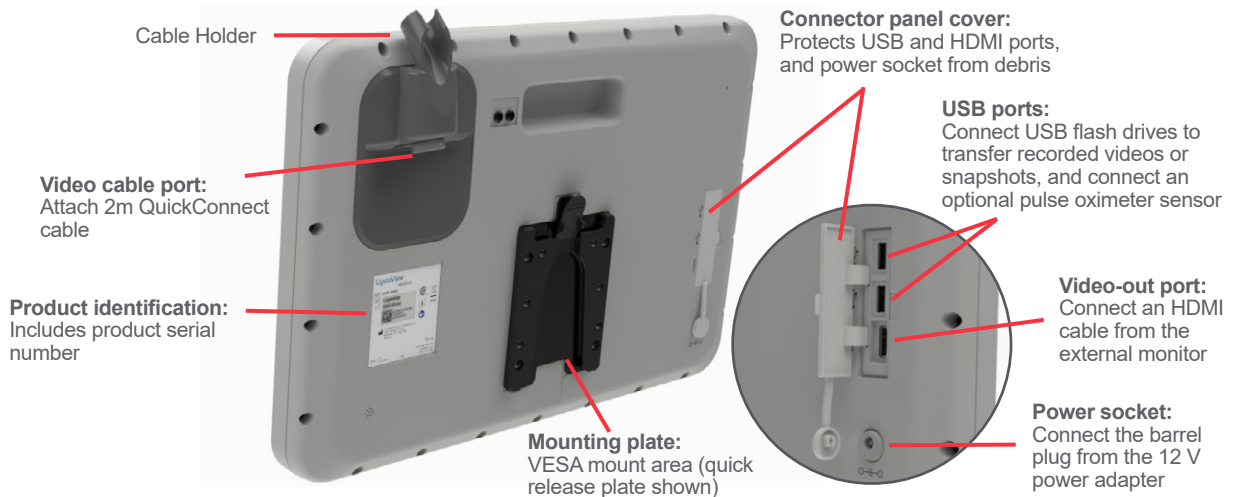


Figure 3. Video Cable Components*

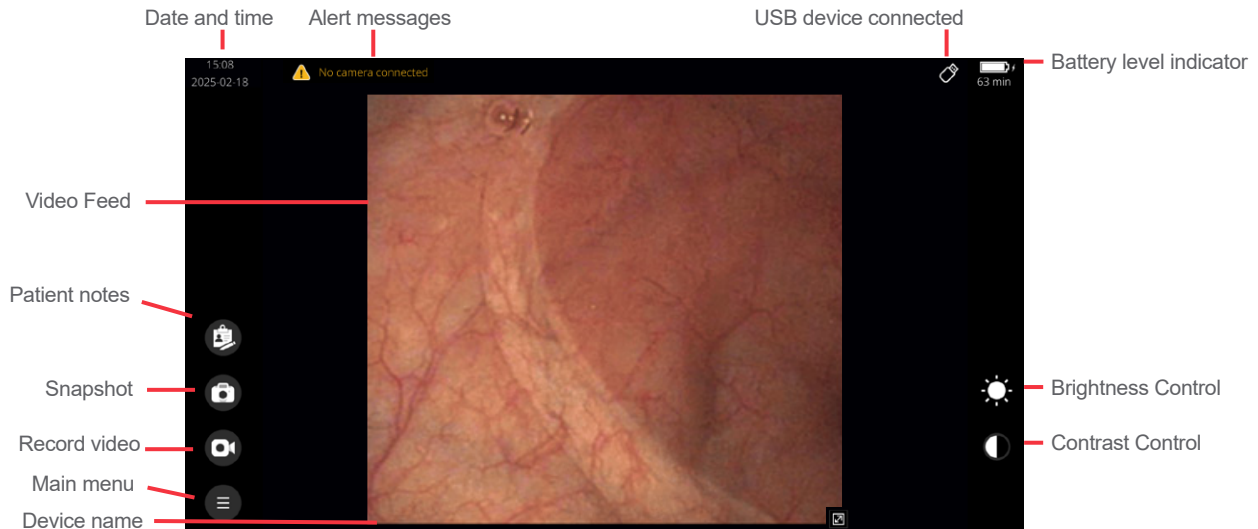


* Cable has been shortened for illustrative purposes.

System Features

Home Screen

The Home screen displays system information and provides access to several options and menus.



STATUS BAR

The Status Bar runs along the top of the display. It is shown at all times and can provide the following information depending on the current screen:

- Date and Time
- Alert messages
- Device name
- System or task status
- USB connection status
- Battery status and approximate time remaining
- Organization controls (Gallery)
- Favorites filter (Gallery)

LEFT BAR

The left bar provides access to the Main Menu, Patient Notes, and Snapshot buttons, and also the Record Video button when it is enabled in the Settings menu*.

RIGHT BAR

The right bar displays buttons for Brightness Control and Contrast Control when they are enabled in the Settings menu.

VIDEO FEED

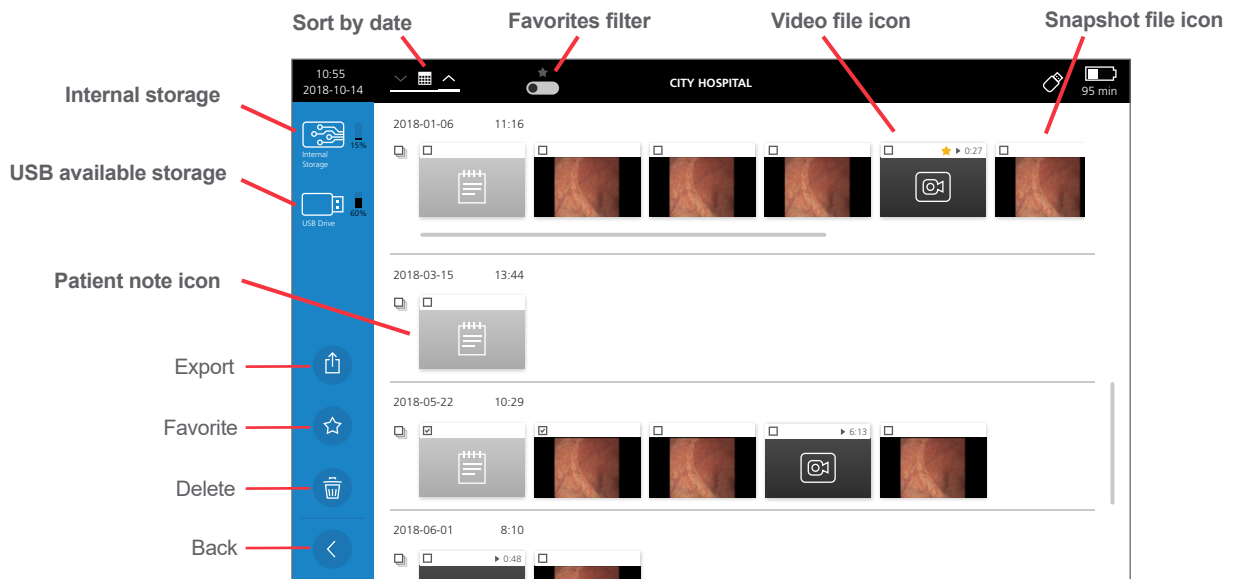
The main feature of the Home screen is the video feed. This displays the video transmitted from the attached scope. This area can also be mirrored to an external monitor through an HDMI connection.

* Video recording is disabled while connected to an external monitor.

Gallery

The Gallery allows you to view videos and snapshots that have been recorded and stored on the monitor. From the Gallery you can view patient notes, create favorites, and export files to a USB flash drive to use as a backup or to view on a computer. For information on using the Gallery, see [Use the Gallery](#) on page 28.

Figure 4. Main Gallery Screen



Setting Up



Please read the [Warnings](#) section before performing the following tasks.

Before you can use the system for the first time, you must inspect the components, set up the system, and perform a functional test as recommended by Verathon. Complete the following procedures:

1. **Perform Initial Inspection**—Inspect the system for any obvious physical damage that may have occurred during shipment.
2. **Mount the System (Optional)**—Set up the monitor on a mobile workstation.
3. **Charge the Monitor Battery**—You can use the system while the battery is charging.
4. **Attach the Video Cable and Scope**—Connect the appropriate video cable to the monitor, and then connect the scope to the video cable.
5. **Connect to an External Monitor (Optional)**—Connect the monitor to an external display, such as a larger monitor screen, by using an HDMI cable.
6. **Complete the Setup Wizard (Optional)**—The Setup Wizard walks you through an initial system configuration with settings such as the date, time, and system security code.
7. **Configure User Settings (Optional)**—Enter data customized to your clinic, and configure settings such as the date, and time, video timestamps, and other administrative settings.
8. **Perform a Functional Check**—Before you use the device for the first time, perform a functional check to ensure that the system is working properly.

Procedure 1. Perform Initial Inspection

When you receive the system, Verathon recommends that an operator familiar with the instrument perform a full visual inspection of the system for any obvious physical damage that may have occurred during shipment.

1. Verify that you have received the appropriate components for your system by referring to the packing list included with the system.
2. Inspect the components for damage.
3. If any of the components are missing or damaged, notify the carrier and Verathon Customer Care or your local representative. For contact information, visit verathon.com/service-and-support.

Procedure 2. Mount the System (Optional)

The monitor is compatible with standard 75x75 mm VESA mounts. If you choose to mount the system, ensure the mount is rated to support the weight of the monitor.

Procedure 3. Charge the Monitor Battery



Please read the [Warnings](#) section before performing the following task.

The CystoView Monitor includes an internal lithium battery. Verathon recommends that you charge the battery fully prior to first use.

Under normal operating conditions, a fully charged battery lasts a minimum of 45 minutes before it needs to be recharged. For optimal battery life, ensure that the battery is fully charged before you try to use the monitor in battery mode. You should charge the battery at temperatures from 10 to 35° C (50 to 95° F).

An estimate of the time remaining is shown under the battery icon. This time is based on the battery draw and may vary depending on the number of components and accessories attached. As the battery is depleted, the battery status bar will shrink, changing color at certain levels.

Figure 5. Battery Status Icons*

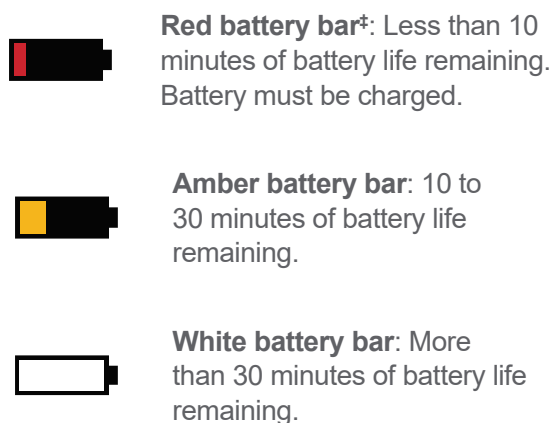
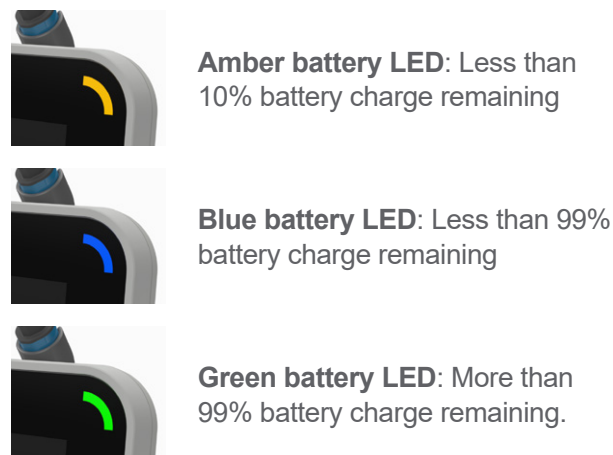
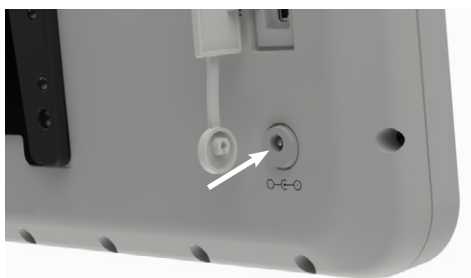


Figure 6. Battery Status LEDs†



1. Connect the video monitor 12 V DC power adapter to the power cable.
2. On the back panel of the monitor, remove the power socket cap, and then connect the 12 V DC power adapter to the power socket.



3. Plug the power supply into an outlet.
4. Allow the battery to charge. Fully charging the battery may take up to 4 hours.

* Battery status icons only appear when the monitor is powered on.

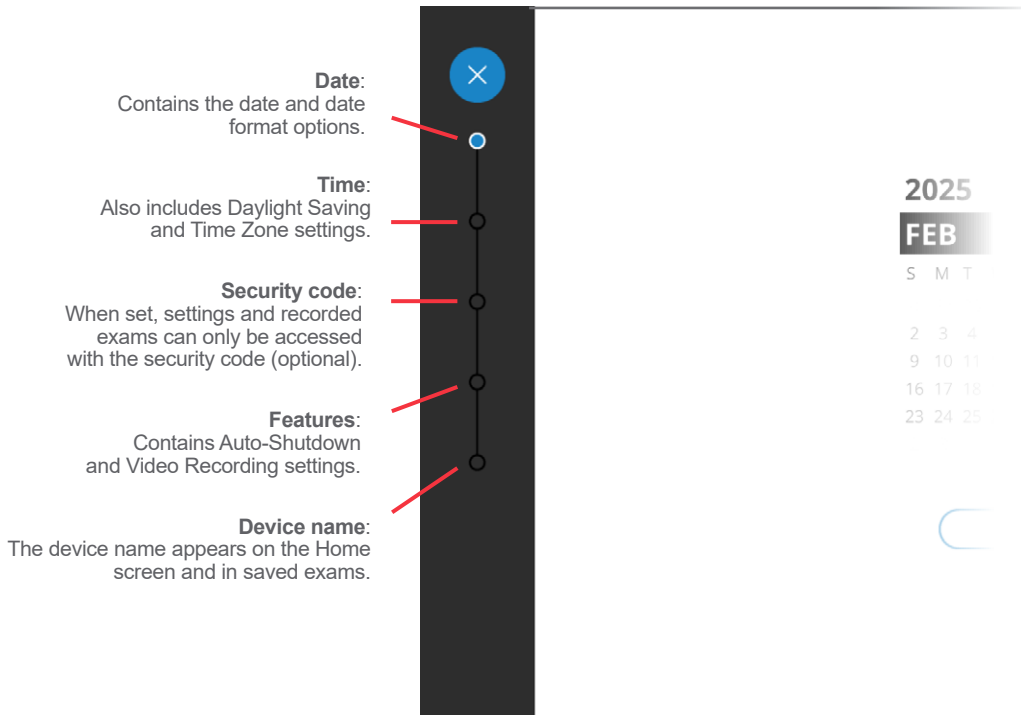
† When the monitor is turned on, and is not connected to mains power, only the amber LED will function.

‡ With less than 10 minutes of battery life remaining, the Record button is hidden and the monitor will not allow video recording. If a video is already recording, the monitor will save it, and then stop recording.

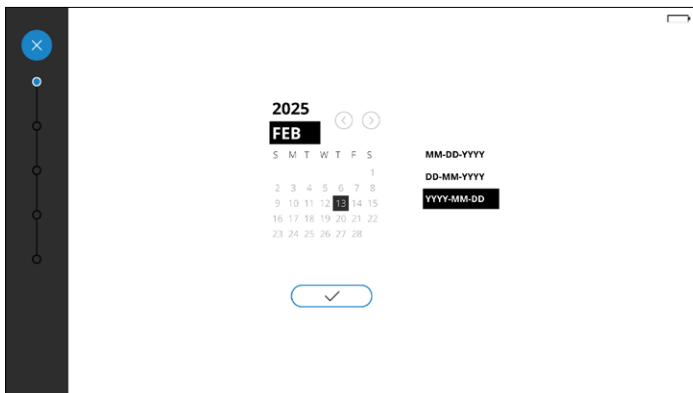
Procedure 4. Complete the Setup Wizard (Optional)

The first time the monitor is powered on, a setup wizard guides you through some initial settings. If the setup wizard has already been completed, or you decide to skip the setup wizard, all settings can be modified in [Configure User Settings \(Optional\)](#) on page 18.

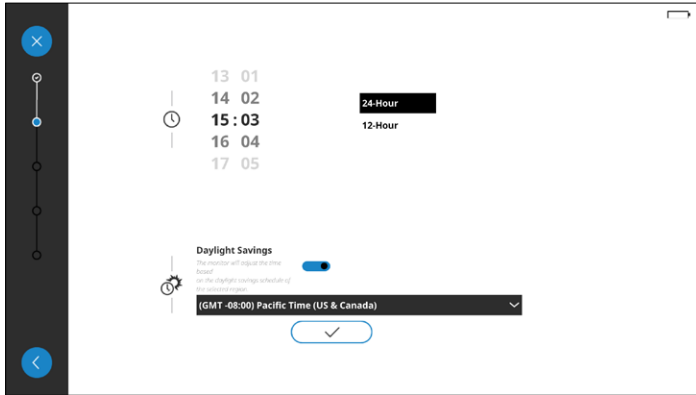
The setup wizard progress bar is shown on the left of the display. To go back to a previous setting, tap the **Back**  button. To exit the wizard, tap the **Close**  button.



1. Set the date and date format, and then tap the check mark to continue.



2. Set the time, time zone, and the daylight saving preference, and then tap the check mark to continue.



3. If you would like to set a security code, enter the code, and then tap the check mark. Confirm the code by re-entering it, and then tap the check mark. If the code is confirmed, you will proceed to the next setting.*

If you do not want a security code, tap the Security Code toggle to **Off** , and then tap the check mark to proceed to the next setting.

Note: When a security code is enabled, users will require it to access the Gallery and system settings.

Figure 7. Security code on

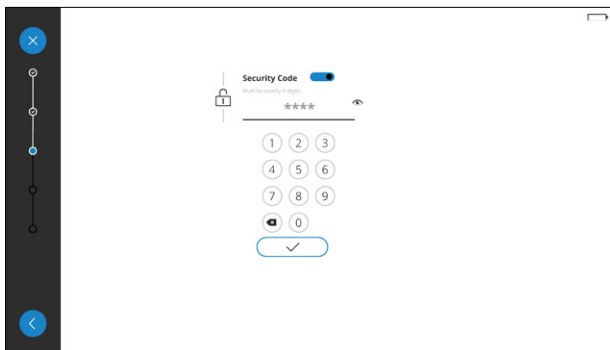
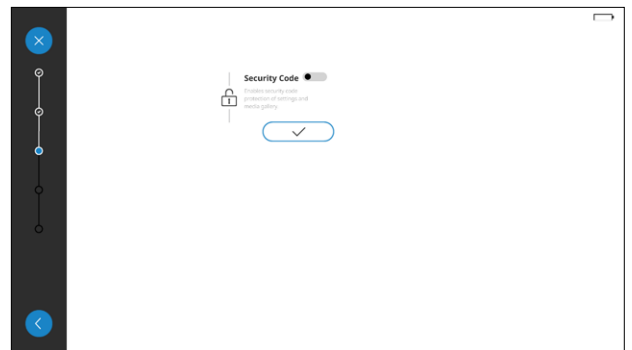



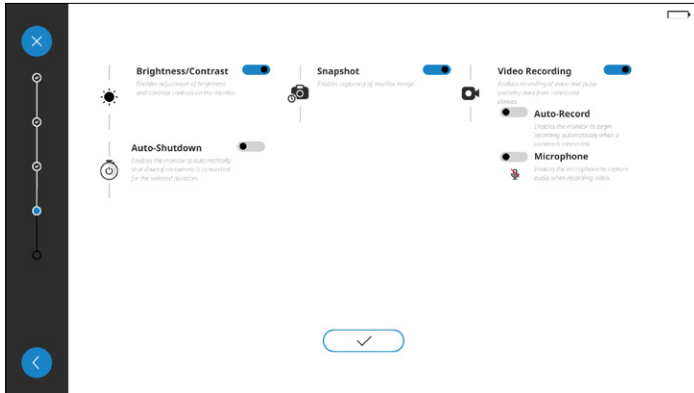
Figure 8. Security code off



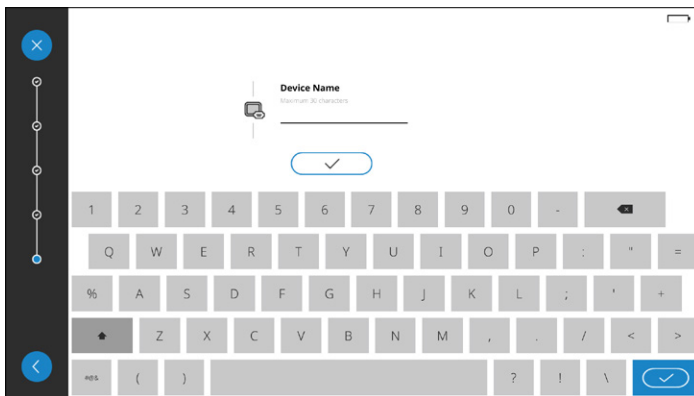
* If the security code has been forgotten, please contact Verathon Customer Care. For contact information, visit verathon.com/service-and-support.

4. To enable or customize an option, tap its toggle to **On** . The following options are available:
 - **Brightness and Contrast:** Toggle the **Brightness/Contrast** option.
 - **Auto-Shutdown options:** Toggle the **Auto-Shutdown** feature and select the Auto-Shutdown duration.
 - **Snapshot:** Toggle the **Snapshots** option.
 - **Video Recording*:** Toggle the **Video Recording** option.

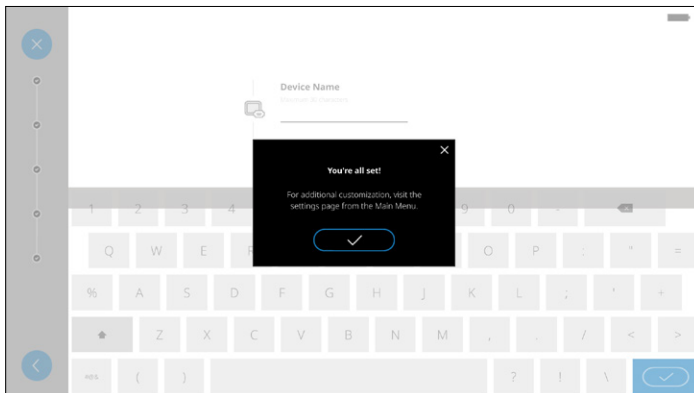
When the settings are configured, tap the check mark to proceed to the next setting.



5. Enter a name for the monitor to help identify it. If a name is not needed, tap the check mark to proceed to the confirmation window.



6. When the settings wizard is done, tap the check mark to return to the Home screen.



7. To configure system settings not covered in the Settings Wizard, or to change existing settings, continue to **Procedure 5, Configure User Settings (Optional)**.

* Video recording is disabled while connected to an external monitor.

Procedure 5. Configure User Settings (Optional)

The Settings menu allows you to configure, change, or view the following system settings and information:

Feature Settings Tab



- System Sounds
- Brightness/Contrast
- Auto-Shutdown
- Snapshot
- Video Recording*
- Video Timestamps

Regional Settings tab

- Date
- Date format
- Time
- Time format
- Daylight Saving Time
- Time Zone list



Administrative Settings Tab

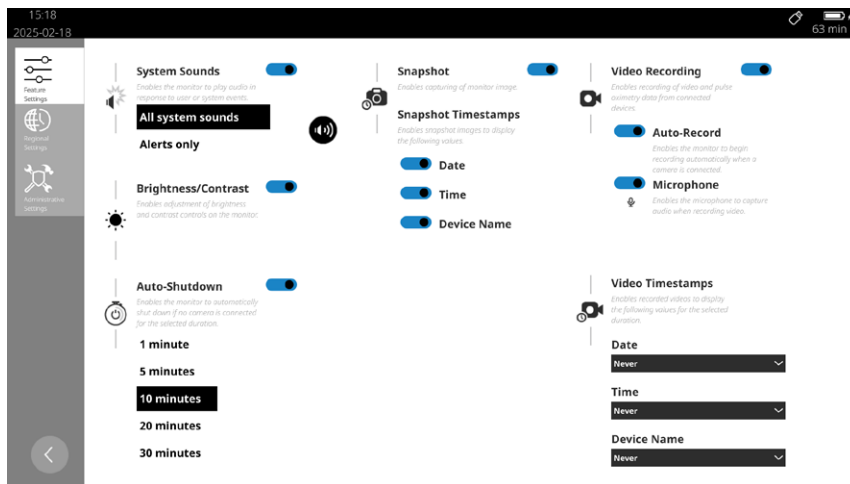
- Usage Statistics
- Device Name
- Security Code
- Note Fields
- System Version
- Reset Settings

A setting is switched on or off by tapping its toggle to the right  (on) or left  (off). When a setting is on, additional configuration options may appear.

FEATURE SETTINGS TAB





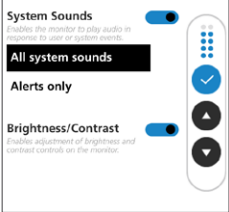
Use the **Feature Settings** tab to modify the System Sounds, Brightness/Contrast, Auto-Shutdown, Snapshot, Snapshot Timestamps, Video Recording, Auto-Record, Microphone, and Video Timestamps settings.

1. To access the **Feature Settings** tab, from the Home screen, tap the **Main Menu**  button, and then tap the **Settings**  button.



* Video recording is disabled while connected to an external monitor.



Table 5. Feature Settings

SETTING	FUNCTION
System Sounds	<p>Toggles whether sound effects are heard when buttons are pressed. When on, provides options for all systems sounds, or alerts only.</p> <p>When the System Sounds are toggled on, tap the Speaker  button to access the following volume controls:</p> <ul style="list-style-type: none"> • Volume Up  — Turns the volume up. • Volume Down  — Turns the volume down. • Check mark  — Saves the volume settings. 
Brightness/Contrast	Toggles whether the brightness and contrast buttons are shown on the home screen.
Auto-Shutdown	Toggles automatic system shutdown. When this feature is on and no scopes are connected, the monitor automatically powers off after the set time. Turn on to show the available timer settings.
Snapshots	<p>Enables access to the following toggles for the Snapshot Timestamps:</p> <ul style="list-style-type: none"> • Date • Time • Device name
Video Recording	<p>Toggles whether the record button is shown on the Home screen. When on, the following settings are shown*.</p> <ul style="list-style-type: none"> • Auto-Recording — Toggles whether video starts recording automatically. • Microphone — Toggles whether the microphone captures audio when recording video. • Video Timestamps — Settings for the date, time, and device name video timestamps. Each of these can be set to always show, only show for the first five seconds, or never show.

* Video recording is disabled while connected to an external monitor.

REGIONAL SETTINGS TAB

Use the **Regional Settings** tab to choose the date, date format, time, time format, daylight saving time, and time zone settings.

1. To access the **Regional Settings** tab, from the Home screen, tap the **Main Menu**  button, and then tap the **Settings**  button.
2. Tap the **Regional Settings** tab. The Regional Settings appear.

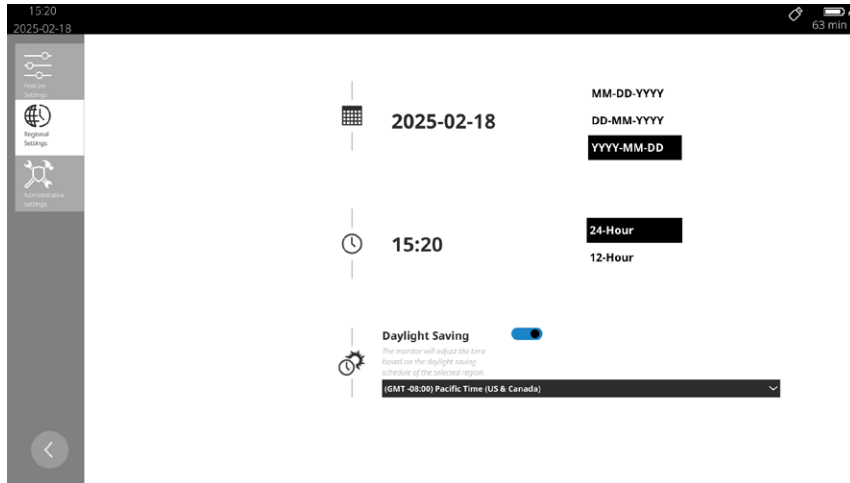




Table 6. *Regional Settings*

SETTING	FUNCTION
Date	Sets the system date.
Date format	Sets how the date is formatted.
Time	Sets the system time.
Time format	Toggles the monitor's time format between 12-hour and 24-hour.
Daylight Saving Time	Toggles whether Daylight Saving is on or off.
Time Zone list	Drop-down list to set the time to the local time zone.

ADMINISTRATIVE SETTINGS TAB

Use the **Administrative Settings** tab to modify the Note Fields, Device Name, and Security Code* settings, as well as access Usage Statistics for the monitor and Power Cycle Times for the monitor and any currently attached scopes.

1. To access the **Administrative Settings** tab, from the Home screen, tap the **Main Menu**  button, and then tap the **Settings**  button.
2. Tap the **Administrative Settings** tab. The Administrative Settings appear.

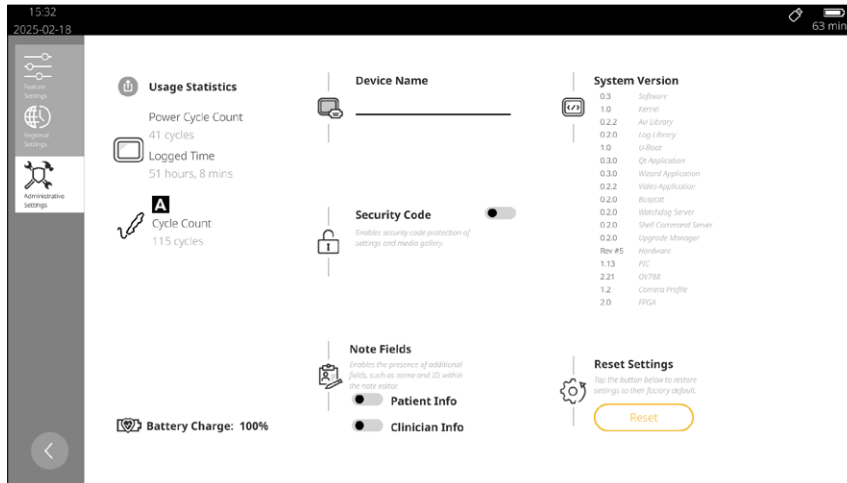




Table 7. Administrative Settings

SETTING	FUNCTION
Usage Statistics	Displays information such as the logged time and power cycle counts.
Device Name	Sets a device name that is shown in the status bar at the top of the display and in video and snapshot time-stamps when the Timestamps setting is on. For more information on Timestamps, see Feature Settings Tab on page 18.
Security Code*	Sets a security code. When set, the security code is required to access the Settings  menu and Gallery  .
Note Fields	Enables the presence of additional fields within the note editor, such as Clinician Information and Patient Information.
System Version	Displays software versions for various system resources.
Reset Settings	Restores all settings back to factory defaults.

* If the security code has been forgotten, please contact Verathon Customer Care to request a security code reset USB flash drive. For contact information, visit verathon.com/service-and-support

Procedure 6. Attach the Video Cable and Scope

The 2m QuickConnect cable attaches the cystoscope to the monitor, supplying power to the cystoscope and transmitting video data from the camera to the monitor.

This procedure provides basic instruction on connecting the cable and scope to the monitor. For detailed information about cystoscopes, refer to the *CFlex Single-Use Cystoscope Operations & Maintenance Manual* (part number 0900-5276) or contact Verathon Customer Care:

If the monitor doesn't detect an attached scope, the following image displays. Once a scope is connected, the video from the camera will be displayed on the screen.

Figure 9. No Attached Scope

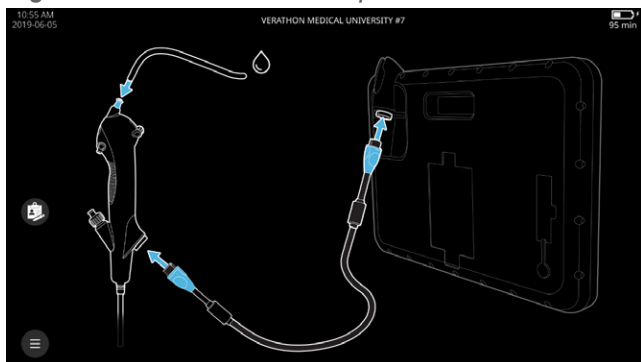
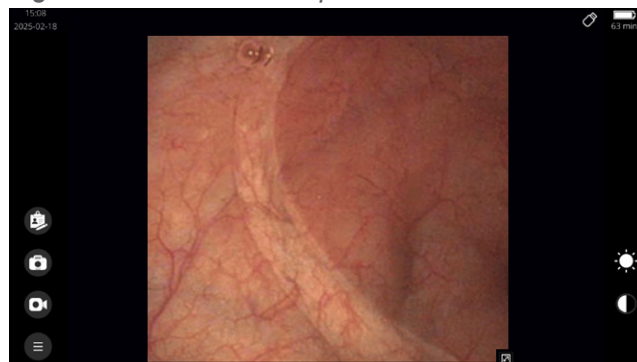
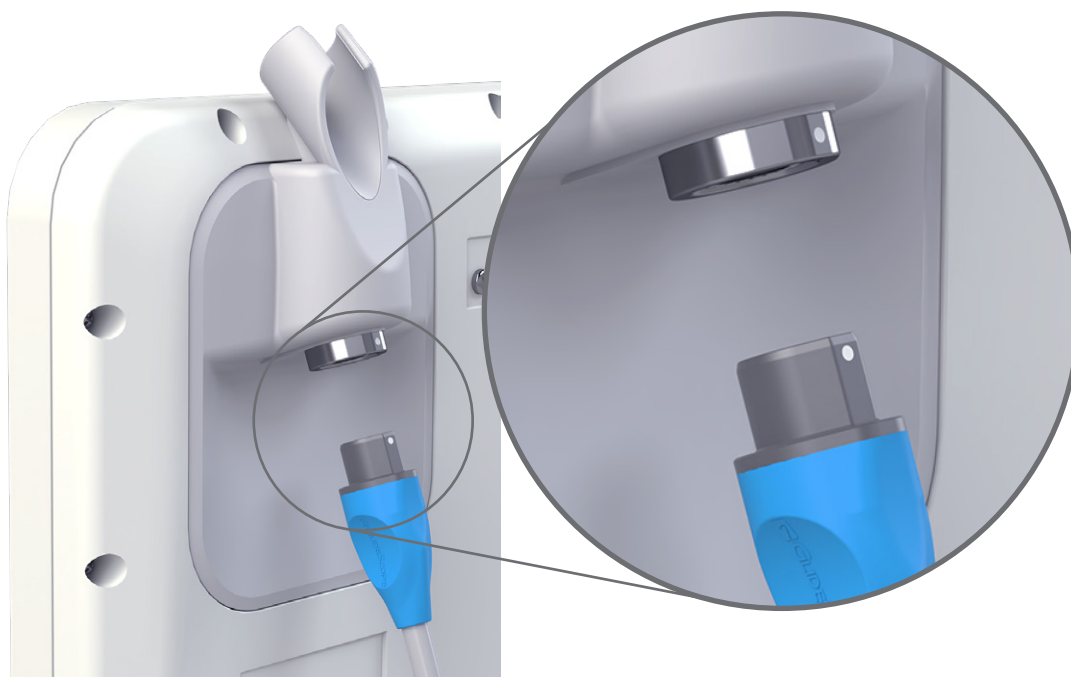


Figure 10. Attached Scope



ATTACH THE VIDEO CABLE TO THE MONITOR

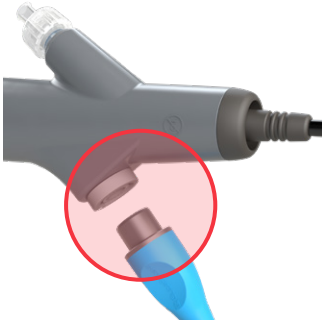
1. Align the dot on cable connector to the dot on one of the monitor's video connectors, and then fully insert the cable. The connector attaches to the monitor.



2. To disconnect the video cable, hold the cable connector in one hand and support the monitor with the other, and then pull. The cable disconnects from the monitor.

ATTACH THE VIDEO CABLE TO THE CYSTOSCOPE

3. Align the white dot on the opposite end of the QuickConnect Cable with the dot on the cystoscope, and then insert the connector into the cystoscope. Magnets in both components hold them in place during use.

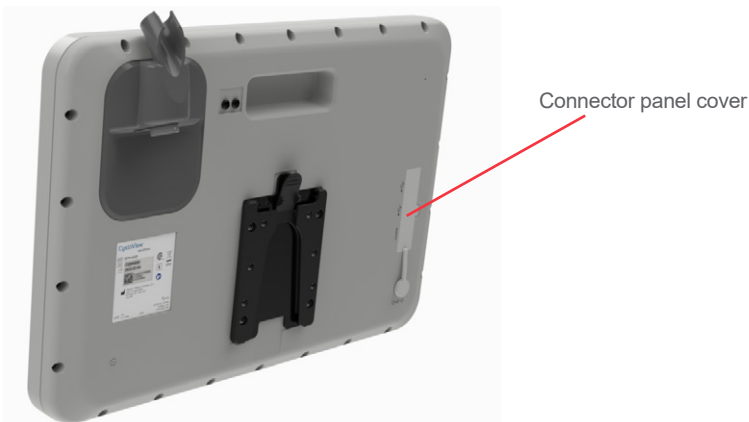


4. To disconnect a cystoscope from the QuickConnect Cable, hold the cable connector in one hand and the handle of the cystoscope in the other, and then pull. The cystoscope disconnects from the cable.

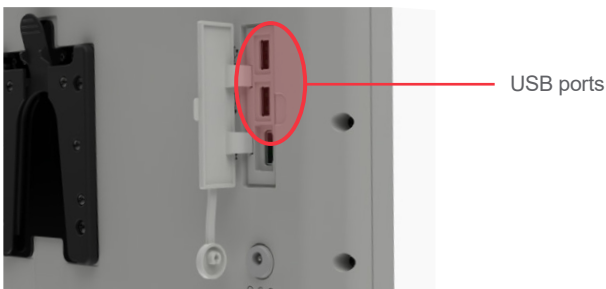
Procedure 7. Attach the USB Device (Optional)


Connecting a USB drive to one of the USB ports allows you to export exams that were saved to the internal memory.

1. On the back panel of the monitor, remove the rubber cover from the USB and HDMI connector panel.



2. Connect the USB device to one of the USB ports.



3. When you connect a USB drive, the display shows a USB icon  to indicate a drive is attached and available to use.

Procedure 8. Connect to an External Monitor (Optional)



Please read the [Warnings](#) section before performing the following task.

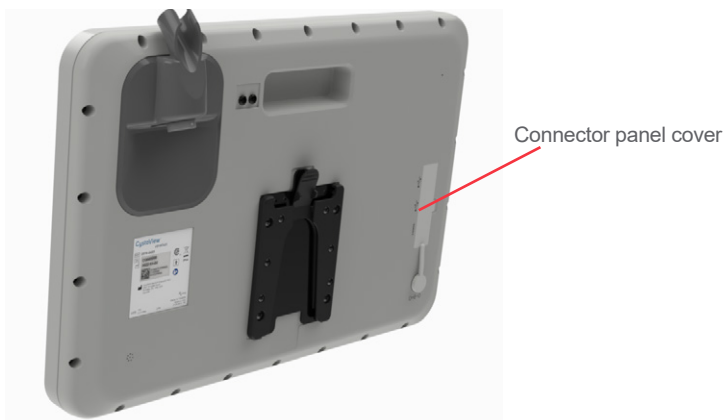
IMPORTANT

To maintain electromagnetic interference (EMI) within certified limits, the system must be used with the cables, components, and accessories specified or supplied by Verathon. For additional information, see the [System Parts & Accessories](#) and [Component Specifications](#) sections. The use of accessories or cables other than those specified or supplied may result in increased emissions or decreased immunity of the system.

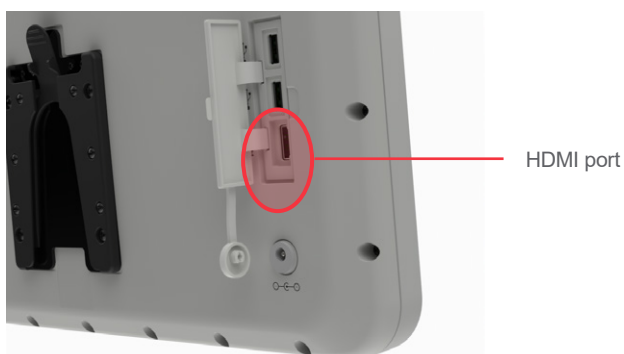
By using an HDMI cable, you can connect the video monitor to an external monitor that is approved for medical use.

Note: Image quality on the external monitor may vary according to the resolution of the external monitor.

1. On the back panel of the monitor, remove the cover from the USB and HDMI connector panel.




2. Connect one end of the HDMI cable to the HDMI port.










3. Connect the other end of the cable to an HDMI port on an external monitor approved for medical use.
4. To stop sending video to an external monitor, disconnect either end of the HDMI cable.

Procedure 9. Perform a Functional Check

Before you use the device for the first time, perform the following functional check to ensure that the system is working properly. Please contact your Verathon Customer Care representative if your system does not function as described below.

1. Fully charge the monitor battery (this takes approximately 4 hours).
2. Attach the video cable and scope to the monitor, according to the instructions in [Attach the Video Cable and Scope](#) on page 22.
3. Press the **Power**  button. The monitor turns on.
4. Look at the monitor screen, and verify that the image displayed is being received from the scope.



5. Tap the **Record**  button*. The record button turns red to indicate the monitor has started recording.
6. Tap the **Record**  button again. The recording stops.
7. Tap the **Snapshot**  button. A snapshot of the video display area is taken.
8. From the **Home** screen, tap the **Main Menu**  button, and then tap the **Gallery**  button to verify the video and snapshot successfully recorded. For more information on using the Gallery, see [Use the Gallery](#) on page 28.
9. Press and hold the **Power**  button. The power-down countdown symbol  appears. The monitor powers off after the countdown.

* Video recording is disabled while connected to an external monitor.

Using the Device

Prior to using the device, set up the device according to the instructions in the previous chapter, and verify the setup by completing Step 1 through Step 4 of the procedure [Perform a Functional Check](#) on page 25.




Please read the [Warnings](#) section before performing the following tasks.

This chapter consists of the following:

- [Prepare the System](#)
- [Record Video or Take a Snapshot](#)
- [Use the Gallery](#)

Procedure 1. Prepare the System

In this procedure, you select and attach the appropriate video and USB accessories for the patient, turn the system on, and verify that the system is functioning properly. For a list of all compatible scopes, see the *CFlex Single-Use Cystoscope Operations & Maintenance Manual* (part number 0900-5276).

1. Using the information in the *CFlex Single-Use Cystoscope Operations & Maintenance Manual* (part number 0900-5276), in combination with a clinical assessment of the patient and the experience and judgment of the clinician, select the scope that is appropriate for the patient and procedure.
2. Attach the chosen scope's video cable to the monitor, according to the instructions in [Attach the Video Cable and Scope](#) on page 22.
3. Press the **Power**  button. The video monitor turns on.

Note: If the monitor locks up or becomes unresponsive for any reason, press and hold the Power button for 10 seconds to reboot the system.

4. Ensure that the battery is sufficiently charged. If necessary, connect the monitor directly to power.
5. On the monitor screen, verify that the image displayed is from the scope's camera.

Note: You do not need to set white balance. The cystoscope and the monitor adjust white balance automatically.

Procedure 2. Record Video or Take a Snapshot



IMPORTANT

The video signals produced and used by this system are intended for device positioning only. Do not use images produced by this system for diagnostic purposes.

The monitor is equipped with video[†] and audio recording features, and the ability to save snapshots of the live display on the monitor and make notes for the current session. The system saves this data to its internal memory. You can view the recordings or snapshots on the video monitor, or export them to a USB flash drive to view them on a computer.

AUTOMATIC RECORDING AND AUDIO

By default, the automatic video recording and audio recording options are disabled. When automatic video recording is enabled, the monitor starts recording once a scope is connected, or once the monitor is powered on with a scope already connected. When audio recording is enabled, the system records audio with the video.

1. To enable automatic recording and audio recording, from the Home screen, tap the **Main Menu**  button, and then tap the **Settings**  button to access the **Feature Settings Tab**.
2. From the **Feature Settings Tab**, ensure Video Recording is enabled, and then adjust the Auto-Record or Microphone options as needed.




MANUAL RECORDING AND SNAPSHOTS

1. To start recording video manually, press the **Record**  button. Video recording starts and is saved to the monitor. The **Record** button turns red  to indicate the recording has started.

If audio recording is enabled, the **Record** button includes a small microphone symbol to confirm the video is recording with audio.

Figure 11. Record button with audio enabled



2. When you are finished recording, press the **Record**  button again. The recording stops.
3. If you would like to save a photo of the live display, press the **Snapshot**  button. A frame briefly appears around the video to indicate the snapshot has been taken. This can also be done while recording video.
4. To create a patient note, press the **Note Editor**  button. The Note Editor opens.
Note: If a video is recording, tapping the Note Editor button saves the video and opens the Note Editor.
5. For information on viewing the recorded files, continue to **Procedure 3, Use the Gallery**.

* With less than 10 minutes of battery life remaining, the Record button is hidden and the monitor will not allow video recording. If a video is already recording, the monitor will save it, and then stop recording.

† Video recording is disabled while connected to an external monitor.

Procedure 3. Use the Gallery



Please read the [Warnings](#) section before performing the following task.

IMPORTANT

Do not remove the USB flash drive while transferring files from the monitor to the USB.

ACCESS THE GALLERY

- From the **Home** screen, tap the **Main Menu**  button, and then tap the **Gallery**  button.

Note: If a security code has been created for the monitor, you will be prompted to enter it before you can access the Gallery.

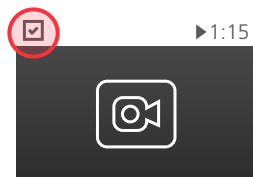
SORT THE GALLERY

- Tap the up or down arrows by the **Sort by Date** icon. When an arrow is selected, it is highlighted and underlined with a white line.

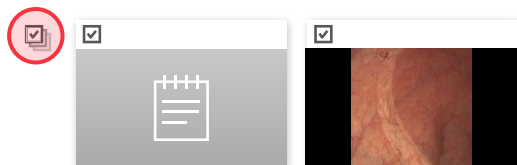
Newest on top  Oldest on top

SELECT FILES


- Tap and hold the file, or tap the check box directly. A file is selected when a mark appears in the check box at the upper left corner of the thumbnail. Repeat to select additional files, or to deselect a file.

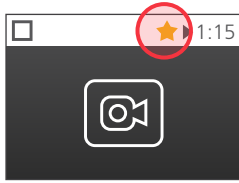


- To select all the files in a row, tap the **Select All** check box to the left of the row.



FAVORITES

1. To mark a file as a favorite, tap the check box to select the file(s), and then tap the **Favorite**  button in the left bar. A star appears in the thumbnail.



Note: Files marked as favorites are protected from being removed from the monitor. If you attempt to move the file to a USB drive, it will be copied to the drive and the file will remain on the monitor.

2. If you would like to turn on or off the Favorites Filter, from the Status Bar, tap the button. When on, the Gallery will show only files marked as a favorite.

Figure 12. Favorite Filter Off

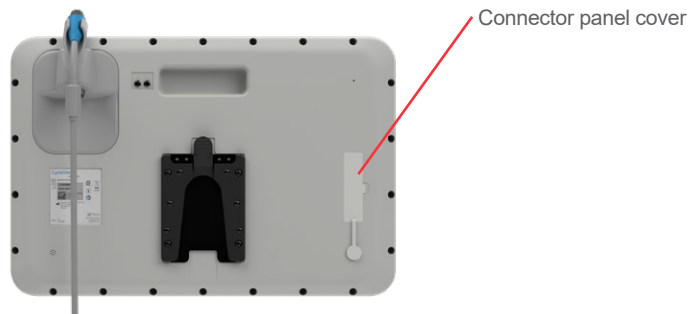


Figure 13. Favorite Filter On

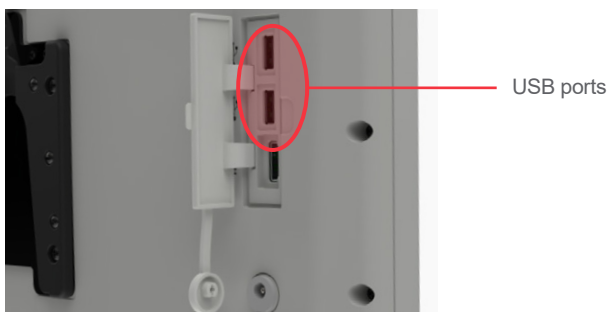





EXPORT VIDEO OR SNAPSHOT

1. On the back panel of the monitor, remove the rubber cover from the USB and HDMI connector panel.

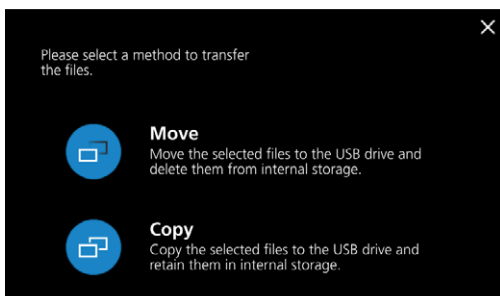




2. Connect the USB flash drive to one of the USB ports.



3. Ensure that the USB flash drive is detected by verifying the USB  icon is visible at the top of the screen.
4. From the Home screen, tap the **Main Menu**  button, and then tap the **Gallery**  button.
5. Tap the selection box at the top left of the file thumbnail to select the file or files you want to export.

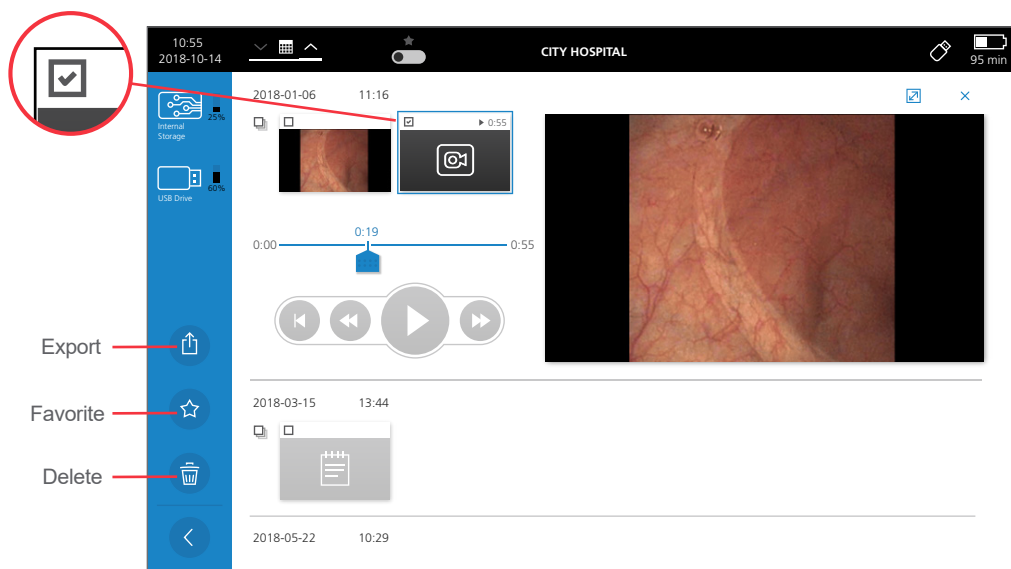
6. Tap the **Export**  button. The Export Selection box appears.



7. Tap either the **Move**  button or the **Copy**  button. The files are moved or copied to the USB drive.
8. After the files have finished exporting, remove the USB drive from the monitor. Files can now be reviewed or backed up on a computer.

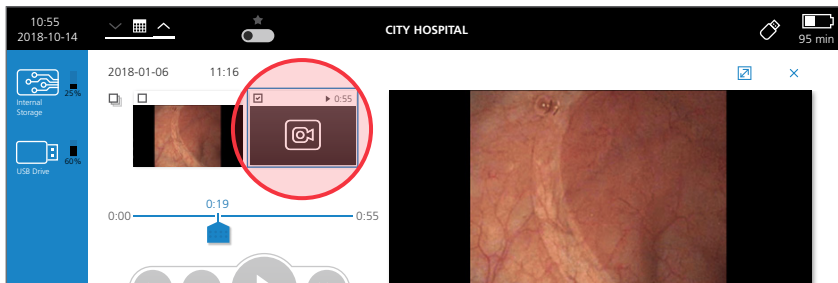
Viewing Media

If you would like to export, delete, or favorite a file being viewed, tap the check box at the upper left corner of the file thumbnail, and then tap the corresponding button on the left of the display.










VIDEO PLAYBACK

1. To review a recorded video, tap its thumbnail. The Video Playback window opens.

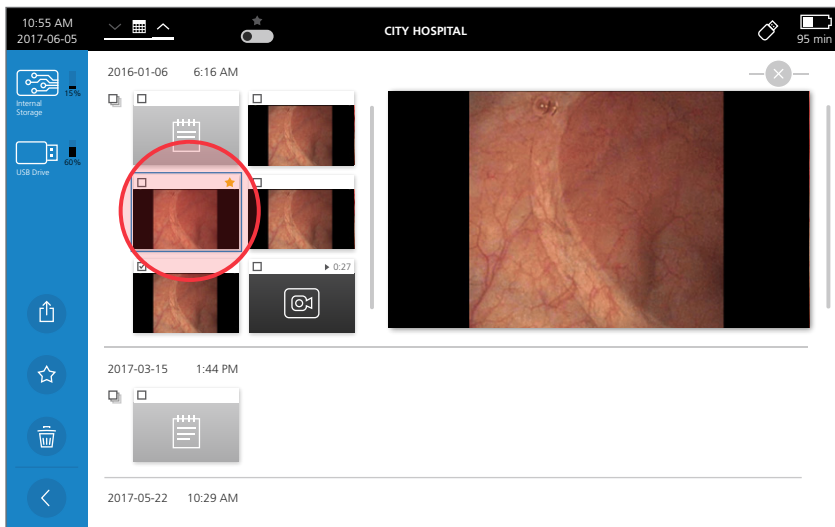


2. The media controls in the Video Playback window provide the following functions:

BUTTON	FUNCTION
	Restart: Rewinds selected video to beginning.
	Rewind: Rewinds selected video by 20%.
	Play Video: Plays selected video. Changes to pause button while video is playing.
	Pause Video: Pauses the playing video. Changes to play button while video is paused.
	Fast Forward: Skips selected video by 20%.
	Playhead: Shows the current location in the video. Can be dragged horizontally to jump to a specific location in the video.
	Expand: Expands the video media to fit the screen while maintaining the correct aspect ratio.

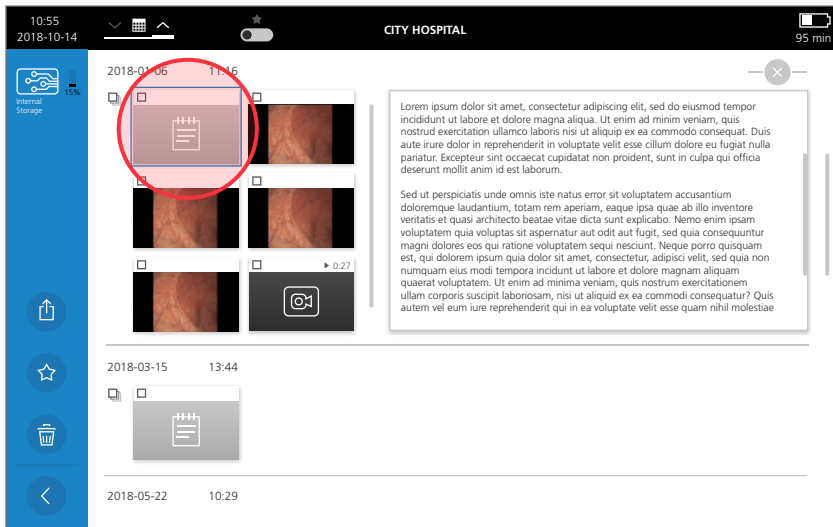
VIEW A SNAPSHOT

- To review a recorded snapshot, tap its thumbnail. The Photo Viewer opens.



VIEW PATIENT NOTES

1. To review a patient note, tap its thumbnail. The note viewer opens.



2. To edit the note, tap inside the text box. A keyboard appears. This can only be done during the same session.



3. Using the keyboard, edit the note as needed, and then tap the check mark button to save your edits.
Note: To see alternates for a character, tap and hold on the character.

Reprocessing

Some of the components in this manual may require cleaning, low-level disinfection, high-level disinfection, or sterilization between uses or under specific circumstances. For information about the cleaning, disinfection, and sterilization requirements for these components, refer to the Airway Management & Urologic Endoscopy Products Reprocessing Manual, which is available at [verathon.com/service-and-support/reprocessing-products](https://www.verathon.com/service-and-support/reprocessing-products).

Maintenance & Safety

Periodic Inspections

No periodic inspections, maintenance, or calibrations are required by Verathon.

Report any suspected defects to Verathon Customer Care or your local representative. For contact information, visit verathon.com/service-and-support.

CystoView Battery

Under normal operating conditions, the monitor battery will maintain its full charge capacity through approximately 500 charge and discharge cycles, after which the battery's charge capacity may decrease. For more information about the battery, see [Component Specifications](#) on page 36.

The battery is not user-replaceable. In case of battery malfunction, do not attempt to replace the monitor battery. Any attempts to replace the battery by unauthorized service technicians may cause serious harm to the user and will void the warranty. Please contact your Verathon Customer Care representative for more information on battery replacement.

If the system's date or time appear to lose accuracy, the internal coin cell battery may be failing. Please contact Verathon Customer Care for more information. For contact information, visit verathon.com/service-and-support.

System Software

Verathon may release software upgrades for the video monitor. Software upgrades are supplied directly by Verathon or an authorized representative, and installation instructions are provided with the upgrade.

This manual documents the most current software version available at the time of writing. If your monitor does not function as described in this manual, or to determine if your software should be updated, contact Verathon Customer Care.

Do not perform any software upgrades from third-party vendors or attempt to modify the existing software. Doing so may damage the monitor and void the warranty.

For information about software language options, see [Regional Settings](#) tab on page 18.

Device Repair

The CystoView components are not user-serviceable. Verathon does not make available any type of circuit diagrams, component parts lists, descriptions, or other information that would be required for repairing the device and related accessories. All service must be performed by a qualified technician.

If you have any questions, contact your local Verathon representative or Verathon Customer Care.



Please read the [Warnings](#) section.

Device Disposal

The system and related accessories may contain batteries and other environmentally hazardous materials. When the instrument has reached the end of its useful service life, it must be disposed of in accordance with WEEE requirements. Coordinate disposal through your Verathon Service Center, or alternatively, follow your local protocols for hazardous waste disposal.

Before disposing of the device, make sure all electronic protected health information is erased.

Product Specifications

Component Specifications


Video Monitor Specifications

Table 8. CystoView Monitor (0570-0465)

GENERAL SPECIFICATIONS		
Classification:	Electrical Class II, Applied Part BF	
Line voltage:	Range: 100–240 V AC, 50 and 60 Hz (If the power cord has a third prong, the third conductor is not intended to be a protective earth connection for the medical power supply.)	
DC power supply:	12 V DC, 2.5 A max	
Ingress protection:	IP54	
Expected Service Life:	5 years	
BATTERY SPECIFICATIONS		
Battery type	Lithium-ion	
Battery life	Under normal operating conditions, a fully charged, new battery lasts a minimum of 45 minutes.	
Charging time	Charging time off-line will take no more than 4 hours from an empty battery to a full charge.	
Rated capacity	3250 mAh	
Nominal voltage	7.2 V	
Nominal weight	110 g (0.24 lbs)	
OPERATING & STORAGE SPECIFICATIONS		
	Operating Conditions	Shipping & Storage Conditions
Temperature:	10–35° C (50 to 95° F)	-20–45° C (-4 to 113° F)
Relative humidity:	10–95%	10–95%
Atmospheric pressure:	700–1060 hPa	440–1060 hPa
COMPONENT SPECIFICATIONS		
Display	TFT Color, 1920 x 1080 px	
Internal memory	4 GB RAM, 128 GB EMMC	
Monitor (A)	39.6 cm (15.6 in)	
Height (B)	298 mm (11.7 in)	
Width (C)	414.5 mm (16.3 in)	
Depth (D)	62 mm (2.4 in)	
Weight	2.98 kg (6.6 lbs)	

Cable Specifications

Table 9. Core 2m QuickConnect Cable (0600-0843)

GENERAL SPECIFICATIONS		
Ingress protection:	IPX7	
ENVIRONMENTAL CONDITIONS		
Qualified for use under the conditions of accompanying system components. For more information, see the other component specifications in this chapter, or your monitor's operations and maintenance manual.		
COMPONENT SPECIFICATIONS		
Length (A)	1981 ± 50 mm	 <p>The diagram shows two parallel cables. Dimension A is indicated by a horizontal line with arrows at both ends, spanning the length of one cable from its left connector to its right connector. Dimension B is indicated by a vertical double-headed arrow between the two cables, representing their diameter.</p>
Diameter (B)	6.8 mm	

Electromagnetic Compatibility

The system is designed to be in compliance with IEC 60601-1-2, which contains electromagnetic compatibility (EMC) requirements for medical electrical equipment. The limits for emissions and immunity specified in this standard are designed to provide reasonable protection against harmful interference in a typical medical installation.

The system complies with the applicable essential performance requirements specified in IEC 60601-1 and IEC 60601-2-18. Results of immunity testing show that the essential performance of the system is not affected under the test conditions described in the following tables.

Electromagnetic emissions

Table 10. Guidance and Manufacturer’s Declaration—Electromagnetic Emissions

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

EMISSIONS TEST	COMPLIANCE	ELECTROMAGNETIC ENVIRONMENT – GUIDANCE
RF emissions CISPR 11	Group 1	The system 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 A	The system is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic emissions IEC 61000-3-2	Class A	
Voltage fluctuations/ flicker emissions IEC 61000-3-3	In compliance	

Electromagnetic immunity


Table 11. Guidance and Manufacturer’s Declaration—Electromagnetic Immunity

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

IMMUNITY TESTS	IEC 60601 TEST LEVEL	COMPLIANCE LEVEL	ELECTROMAGNETIC ENVIRONMENT – GUIDANCE
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV contact ± 15 kV air	In compliance	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	± 2 kV for power supply lines 100 kHz repetition frequency	In compliance	Mains power quality should be that of a typical hospital environment.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to earth	In compliance	Mains power quality should be that of a typical hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	0% U_T for 0.5 cycle 70% U_T for 25 cycles at 50 Hz, 30 cycles at 60 Hz 0% U_T for 250 cycles at 50 Hz, 300 cycles at 60 Hz	In compliance	Mains power quality should be that of a typical hospital environment. If the user of the system requires continued operation during power mains interruptions, it is recommended that the system be powered from an uninterruptible power supply or a battery.
Rated power frequency magnetic fields IEC 61000-4-8	30 A/m Frequency 50 Hz	In compliance	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical hospital environment.
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz 6Vrms in ISM bands 150 kHz to 80 MHz 80% AM at 1 kHz	In compliance	Portable and mobile RF communications equipment should be used no closer to any part of the system, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance d (m) $d=1.2 \sqrt{P}$ (150 kHz to 800 MHz) $d=2.4 \sqrt{P}$ (800 MHz to 5.8 GHz) where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

Table 11. Guidance and Manufacturer’s Declaration—Electromagnetic Immunity

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

IMMUNITY TESTS	IEC 60601 TEST LEVEL	COMPLIANCE LEVEL	ELECTROMAGNETIC ENVIRONMENT – GUIDANCE
Radiated RF IEC 61000-4-3: 2020	3 V/m 80 MHz to 2.7 GHz 80% AM at 1 kHz	In compliance	Interference may occur in the vicinity of equipment marked with the following symbol: 
Radiated immunity to proximity RF fields IEC 61000-4-3: 2020	27 V/m 380 to 390 MHz Pulse modulation, 18 Hz 28 V/m 430 to 470 MHz FM, ± 5 kHz deviation, 1 KHz sine 9 V/m 704 to 787 MHz Pulse modulation, 217 Hz 28 V/m 800 to 960 MHz Pulse modulation, 18 Hz 28 V/m 1700 to 1990 MHz Pulse modulation, 217 Hz 28 V/m 2400 to 2570 MHz Pulse modulation, 217 Hz 9 V/m 5100 to 5800 MHz Pulse modulation, 217 Hz	In compliance	RF wireless communication equipment may interfere with the operation of medical electrical equipment. Avoid placement or use of RF wireless communication equipment near, adjacent to, or stacked with medical electrical equipment.
Immunity to proximity magnetic fields IEC 61000-4-39: 2017	134.2 kHz @ 65 A/m, Pulse modulation 13.56 kHz @ 7.5 A/m, Pulse modulation Additionally, frequency sweep 9kHz to 13.56MHz	In compliance	Proximity magnetic fields should be at levels characteristic of a typical location in a hospital environment.

 Note: U_T is the AC mains voltage prior to application of the test level.

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

The presence of electromagnetic disturbances may cause loss or degradation of the image displayed on the monitor. If this occurs, take one or more of the following actions to resolve it:

- Turn devices on and off in the vicinity to determine the source of interference.
- Reorient or relocate this device or other devices.
- Increase the separation between devices.
- Connect the device to an outlet on a circuit different than the other device(s).
- Eliminate or reduce EMI with technical solutions (such as shielding).
- Purchase medical devices that comply with the IEC 60601-1-2 standard.

Be aware that portable and mobile radio frequency communications equipment (such as cellular telephones) may affect medical electrical equipment; take appropriate precautions during operation.

Accessory Conformance to Standards

To maintain electromagnetic interference (EMI) within certified limits, the system must be used with the cables, components, and accessories specified or supplied by Verathon. The use of accessories or cables other than those specified or supplied may result in increased emissions or decreased immunity of the system.

Table 12. EMC Standards for Accessories

ACCESSORY	MAX LENGTH
AC power cord	4.5 m (15 ft)
DC medical power adapter cable	1.8 m (6 ft)
2m QuickConnect Cable	2.03 m (6.7ft)

Glossary

The following table provides definitions for specialized terms used in this manual or on the product itself. For a full list of caution, warning, and informational symbols used on this and other Verathon products, please refer to the *Verathon Symbol Glossary* at verathon.com/service-and-support/symbols.

TERM	DEFINITION
A	Ampere
AC	Alternating current
AER	Automated endoscope reprocessor
C	Celsius
CFR	Code of Federal Regulations (U.S.)
CISPR	International Special Committee on Radio Interference
cm	Centimeter
CSA	Canadian Standards Association
EMI	Electromagnetic interference
ESD	Electrostatic discharge
Essential performance	The system performance necessary to achieve freedom from unacceptable risk
F	Fahrenheit
FHD	Full high definition
g	Gram
GHz	Gigahertz
HDMI	High-definition multimedia interface
hPa	Hectopascal
Hz	Hertz
IEC	International Electrotechnical Commission
in	Inch
ISM	Industrial, scientific, and medical
kHz	Kilohertz
kV	Kilovolt
lbs	Pounds
m	Meter
mAh	Milliampere-hour
MDD	Medical Device Directive
MHz	Megahertz
mm	Millimeter
OSHA	Occupational Safety and Health Administration (federal agency in U.S.)
RF	Radio frequency
RH	Relative humidity

TERM	DEFINITION
RoHS	Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment
V	Volt
Vrms	Voltage root mean squared
W	Watt
WEEE	Waste electrical and electronic equipment

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