

Iron Bow Vidyo CLINiC[™] 10x Clinical Care Device User Guide

For use with Iron Bow Part Number: CLINiC-V-10X24IR-Bxx

Document Part # DOC-UG-CLINIC-V10X24-B Version 4.3 3/18/2021

Copyright © 2021 Iron Bow Technologies All Rights Reserved.

Specifications subject to change without notice.

For general inquiries, contact:
Iron Bow Healthcare Solutions
2303 Dulles Station Boulevard, Suite 400
Herndon, VA 20171

Toll: 800.338.886 Tel: 703.279.300

www.ironbowhealthcare.com

For support, contact:

Iron Bow Client Service Center

Toll: 833.476.6269 (833.IRONBOW)

Email: CSC@ironbow.com

Safety & Maintenance

For your protection, please read these safety instructions completely before operating the equipment and keep this manual for future reference. The information in this summary is intended for persons who operate the equipment as well as repair or servicing personnel. Carefully observe all warnings, precautions and instructions on the apparatus, or the ones described in the operating instructions and adhere to them. Also, adhere to safety guidelines found in manuals for any peripheral equipment.

Care and Handling

- Water and moisture Do not operate the equipment under or near water, or in areas with high humidity.
- Cleaning Unplug the apparatus from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners, follow cleaning instructions provided
- Ventilation Do not block any of the ventilation openings of the apparatus. Install in accordance with the installation instructions.
- Grounding or Polarization use the power cord provided with this system, do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician.
- Plug Acts as Disconnect Device The socket outlet to which this apparatus is connected must be installed near the equipment and must always be readily accessible.

	United States	Canada
Plug Type	Grounding type 3 Pole Plug	Grounding type 3 Pole Plug
Cord Type	SVT3 x 18 AWG	SVT3 x 18 AWG
Minimum Cord Set Rating	10A/125V	10A/125V
Safety Approval	UL/CSA	CSA

- Lightning Unplug this apparatus during lightning storms or when unused for long periods of time.
- Network cables CAUTION To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.
- Power-Cord Protection Route the power cord so as to avoid it being walked on or pinched by items placed upon or against it, paying particular attention to the plugs, receptacles, and the point where the cord exits from the apparatus.
- Attachments Only use attachments as recommended by the manufacturer. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Storage If you need to store the system, ensure that it is stored in a controlled environment to avoid damage:
 - ➤ Non-operating temperature: $-20^{\circ}C 60^{\circ}C$
 - Non-operating humidity (non-condensing): 10%–95%
- Repacking Do not throw away the carton and packing materials. They may be required in the event that you need to move the system to an alternate location, or return the system for maintenance.
- "WARNING Do not modify this equipment without authorization of the manufacturer."
- Servicing Do not attempt to service the apparatus yourself as opening or removing covers may expose you to dangerous voltages or other hazards, and will void the warranty. Refer all servicing to qualified service personnel. If the equipment is damaged, unplug the apparatus from the outlet and refer servicing to qualified personnel:
 - > When the power cord or plug is damaged or frayed
 - ➤ If liquid has been spilled or objects have fallen into the apparatus
 - > If the apparatus has been exposed to rain or moisture
 - If the apparatus has been subjected to excessive shock by being dropped, or the cabinet has been damaged
 - ➤ If the apparatus fails to operate in accordance with the operating instructions.

Cleaning Instructions

CAUTION

- Due to the close proximity of electrical power and equipment, flammable cleaners should never be used to clean these products!
- The surface materials of the unit are primarily powder-coated aluminum and are durable and easy to maintain, however they can stain and discolor, so test any cleaners in an inconspicuous place before using.
- Do not allow any liquids to enter the unit, drip down the monitor or accumulate on any surface.
- Please refer to the respective Materials Safety Data Sheets (MSDS) for detailed descriptions for each product from its manufacturer.
- Never use steel wool, Scotch-Brite™ or other abrasive materials to clean the product.
- Use extreme caution when cleaning the camera, as it is delicate and easily broken.
- Use extreme caution when cleaning a display monitor, as they are easily damaged if too much pressure is applied.

General Procedure

- 1. Verify the system is unplugged from the AC Power outlet before cleaning.
- 2. Use a soft, clean microfiber cloth or manufacturer supplied disposable cloth for all applications, particularly when cleaning lenses and monitors. Do not spray liquids directly on the surface.
- 3. Utilize appropriate cleaners for the surface being cleaned.
- 4. Allow equipment to fully dry prior to plugging into a power source.
- 5. To facilitate an effective infection control program and ensure proper performance, routinely clean, disinfect, and maintain products in accordance with approved procedures. Specifically, the hospital's Infection Control Administrator should be consulted for cleaning procedures and processes.

Suggested chemical cleaners/disinfectants/solutions for CLINiC and MedView:

- · Chassis cleaning
 - o Non Abrasive Soap/Detergent: Generally, water and mild non-abrasive soap/detergent or isopropyl alcohol can be used routinely on CLINiC or MedView products to maintain proper cleanliness.
 - o Where infection control is required
 - A 10% or less bleach solution can be used to disinfect. Remove residue using a clean damp (water) cloth.
 - Branded chemical disinfectant products (test specific product on a sample surface before general use)
 - Metrex CaviWipes
 - Clorox Germicidal Wipes
- Display monitor LCD panel and camera body (not the lens)
 - o Do not use any of the following chemicals or any solutions that contain: chlorine (bleach), acetone, peroxides, ammonia, ethyl alcohol, benzene, toluene, ethyl acid, or methyl chloride.
 - o Branded, ammonia-free LCD cleaning products
 - Zeiss Pre-Moistened Lens Cleaning Wipes
 - CloroxPro Clean Screen Wipes
 - o Up to 50:50 isopropyl alcohol to distilled water mixture for general cleaning, using soft microfiber cloth
 - o Use 70:30 isopropyl alcohol and distilled water mixture for infection control, using soft microfiber cloth
- Camera Lens
 - Use only branded, ammonia-free cleaning wipes specifically designed for lens cleaning
 - Zeiss Pre-Moistened Lens Cleaning Wipes

Notes and Caution

- Use extreme caution when cleaning the camera and monitor/display. Do not apply undue pressure to the LCD screen, or manually move the camera when it is powered. Damage caused by improper cleaning will void the Iron Bow warranty.
- Do NOT use mineral spirits, acetone, paint thinners, or abrasive cleansers, or any other flammable, harsh or toxic chemicals.
- This document provides general guidelines only. Direction for proper cleaning and infection control is the responsibility of local authority and hospital administration.
- Iron Bow is not responsible for improper cleaning or disinfection in any and all circumstances.

Electrical Safety Information

Compliance is required with respect to the voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a power source different than those specified herein will likely result in improper operation or damage to the equipment, or pose a fire hazard.

There are no user-serviceable parts inside this equipment. There are hazardous voltages generated by this equipment that constitute a safety hazard. Service should be provided by a qualified service technician only. Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment to mains power.

Operating Guidelines

Mounting Guidelines

The system is designed for attachment to a desktop stand, cart of similar supporting structure using the rear 100mm x 100mm VESA mount on the rear of the system chassis. Care should be taken to ensure that any supporting device is designed for 100mm x 100mm VESA mounting and is capable of supporting the weight of the system and any attached peripherals/cables.

Connecting Peripheral Equipment

It is recommended that the supporting device incorporates an AC isolation transformer if the system is to be used with any external peripheral that may have direct skin contact. The optional stand available for this system incorporates a suitable isolation transformer and many mobile carts contain isolated power sources derived from internal rechargeable battery packs. It is also recommended that any external device that may have skin contact are individually certified for such use to avoid risk of injury.

Any AC powered peripheral device must be connected to a separate AC outlet suitable for use with the device as defined by the manufacturer's specification information. In addition, AC power strips or extension cables should not be used with this system.

Ambient Temperature Guidelines

- > Operating temperature: 5°C –35°C (ambient temperature)
- Properating humidity: 20%–80% (RH)
- ➤ Non-operating temperature: -20°C -60°C
- Non-operating humidity (non-condensing): 10%–90%

Contents

Table of Figures	7
Introduction	
System Description	
System Installation	
Installing the Camera	10
Installing System Controller	12
Sound Deflector	13
Installing the Sound Deflector	13
Connections	14
Wi-Fi Network Operation	15
Installing the Wi-Fi Antennas	15
Getting Started	16
Powering On and Off	16
Waking Up the Vidyo CLINiC	16
Powering Off the Vidyo CLINiC	16
Restarting the Vidyo CLINiC	16
Connecting to the Network	16
Vidyo CLINiC Software Set Up & Administration	17
Appendix #1: System Controller Functions	18
Appendix #2: Mounting Information	22
Specifications	23

Table of Figures

Figure 1 - Vidyo CLINiC with Optional Table Stand	8
Figure 2 - Vidyo CLINiC System Components	9
Figure 3 - Attaching Camera to Mounting Plate	10
Figure 4 - Attaching Mounting Plate to System Chassis	10
Figure 5 - Connecting the two Camera Cables	11
Figure 6 - Attaching Rear Camera Cover	11
Figure 7 – Controller Assembly	12
Figure 8 – Attaching Controller	12
Figure 9 - Sound Deflector Shield	13
Figure 10 - Sound Deflector Installation	13
Figure 11 - Sound Deflector Screw Location	13
Figure 12- System Connection Ports	14
Figure 13 - Location of Wi-Fi Antennas	15
Figure 14 - Installing Wi-Fi Antenna	15
Figure 15 - System Controller Admin UI Default Settings	17
Figure 16 - Example of "On Screen" Icons	18
Figure 17 - Tethered Controller Keys	
Figure 18 - System Dimensions	22

Introduction

The CLINiC family of products from Iron Bow Healthcare Solutions consists of purpose-built telehealth devices that enable the delivery of healthcare clinical evaluation, communications and observation from a distance.

This user guide covers the assembly and installation of the second generation Vidyo CLINiC, Part # CLINiC-V-10X24IR-B0x. For Administration and Configuration of the Iron Bow Vidyo CLINiC, refer to the: *VidyoRoom and VidyoPanorama 600 Administrator Guides and VidyoRoom SE Deployment Guides*

https://support.vidyocloud.com/hc/en-us/articles/218145337-VidyoRoom-and-VidyoPanorama-600-Administrator-Guides-and-VidyoRoom-SE-Deployment-Guides

This generation of product incorporates a hermetically sealed, high grade fan less computer with Windows 10 Pro operating system, a high definition pan/tilt camera with a10x optical/10x digital zoom, dual infrared illuminators for nighttime or darkened room operation and a 24" HD display. The Vidyo CLINiC camera, display and associated audio system enable high quality video and audio calls between two parties or more.

Standard room system controls are available to the user via a hand held tactile membrane control panel, which is connected to the system via a coiled cable. The Vidyo CLINiC incorporates a standard VESA mounting hole pattern for installation on common wall mount brackets, table top stands or mobile carts.

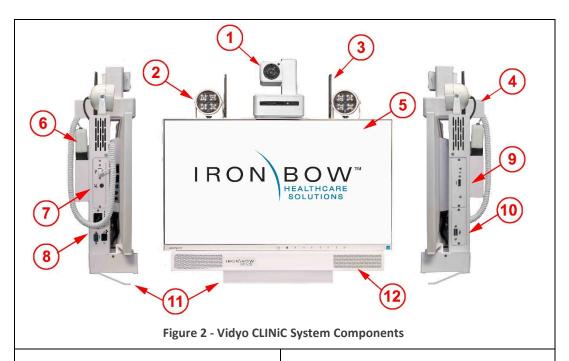


Figure 1 - Vidyo CLINiC with Optional Table Stand

You can find additional CLINiC resources, support information and other related telehealth services at www.ironbowhealthcare.com.

System Description

The primary components of the Iron Bow Vidyo CLINiC are shown below:



- 1. System Camera
- 2. Infra-Red Illuminator (1 of 2)
- 3. Wi-Fi Antenna (1 of 2)
- 4. Camera rear cable cover
- 5. Integrated 24" LED Display
- 6. Hand Held Controller

- 7. Electronic Stethoscope Input
- 8. Power/Network Connectors
- 9. HDMI (PC) Input
- 10. USB 3 (Horus Scope) Input
- 11. Sound Deflector
- **12.** Integrated Microphones

System Installation

The Vidyo CLINiC is designed to be mounted on a stable supporting structure that prevents it from being knocked over or dropped. The standard VESA mounting hole pattern on the back of the unit fits many commercially available wall mount brackets, desk stands and mobile carts. Prior to installation, please refer to <u>Appendix A</u> for mounting holes locations and dimensions. Please note, a Phillips #1 and #2 screwdriver is required for system assembly.

Installing the Camera

Before using the system for the first time, you need to mount and connect the camera to the mounting panel located on top of the Vidyo CLINiC.

To install the camera on the Vidyo CLINiC:

- 1. Remove camera assembly from packaging and place carefully on a table top.
- 2. The system is supplied with a camera mounting plate and countersunk bolt to attach the camera to the mounting plate.

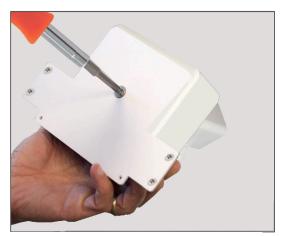


Figure 3 - Attaching Camera to Mounting Plate

3. Ensure the rear connectors of the camera are located at the rear of the mounting plate, as shown below:



Figure 4 - Attaching Mounting Plate to System Chassis

- 4. Gently place the camera assembly on top of the Vidyo CLINiC ensuring the holes on the camera mounting plate line up with the mounting holes on top of the Vidyo CLINiC chassis.
- 5. Attach the camera assembly to the Vidyo CLINiC chassis using the four provided Philips head screws.



Figure 5 - Connecting the two Camera Cables

- 6. Connect the two cables that come out at the top of the Vidyo CLINiC to the corresponding connectors on the rear of the camera.
- 7. Attach the rear camera cable cover using the two Phillips head screws provided.

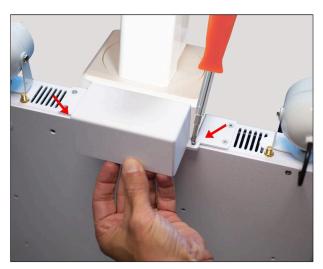


Figure 6 - Attaching Rear Camera Cover

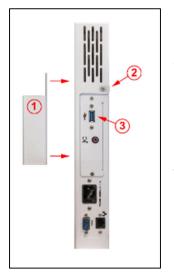
8. Gently remove any packaging foam and tape from camera to complete system assembly.

Installing System Controller

The Vidyo CLINiC utilizes a tethered controller that operates all local room functions. The controller attaches to the system via a USB port and uses a cable clamping arrangement to ensure that it is not accidently disconnected.

A rear mounting cradle is supplied with the system to store the controller when not in use or when the system is moved from one location to another.

To install the controller and cradle on the Vidyo CLINiC:



- 1. Unpack controller and cradle assembly from packaging
- 2. Align cradle mounting holes with rear chassis attachment points (1) and attach with supplied screws
- 3. Remove cable clamp screw (2), feed remote cable through clamp and re-attach using existing screw
- 4. Identify USB 3 port on side of chassis (3) and connect remote controller cable



Figure 7 - Controller Assembly



Figure 8 – Attaching Controller





Sound Deflector

The Vidyo CLINiC includes a removable sound deflector, which can be installed underneath the sound bar as shown below:



Figure 9 - Sound Deflector Shield

The sound deflector improves the audio quality for the Vidyo CLINiC installations that are either wall-mounted or mounted on an arm, by deflecting the audio forward.

Installing the Sound Deflector

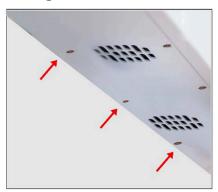


Figure 11 - Sound Deflector Screw Location



Figure 10 - Sound Deflector Installation

Locate the three central Phillips head screws on the base section of the sound bar at the rear of the chassis.

1. Remove the three Phillips head screws and align the deflector, pointing forward, with the three screw holes and replace screws to secure shield in place.

Connections

The Vidyo CLINiC includes an AC power inlet, an Ethernet port for connecting to a wired network, two USB 3 ports for connecting the system controller plus an external examination device, such as a Horus Scope and an HDMI Video Input for connection of an external PC.

If it is necessary to attach a standard PC keyboard/mouse for system set up, the two USB 3 ports designated for the controller and a Horus Scope, can be utilized for connection of these devices. Once set up has been completed, the keyboard/mouse should be disconnected and the system controller and Horus Scope re-connected. The system should then be power cycled to ensure correct operation.

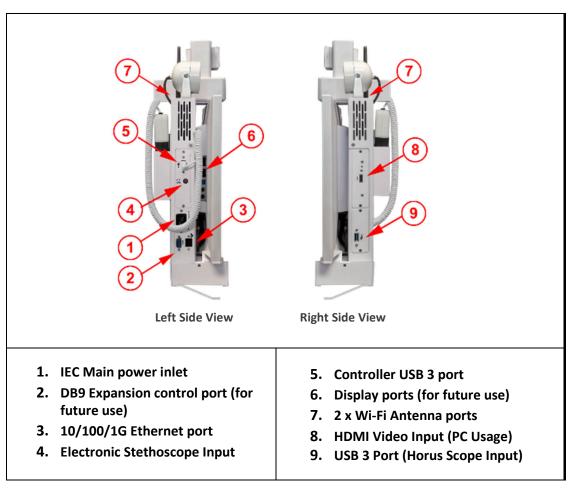


Figure 12- System Connection Ports

Wi-Fi Network Operation

The Vidyo CLINiC can be connected to either a wired or wireless (Wi-Fi) network. To operate from a Wi-Fi network, the two supplied antennas need to be attached to the system.



Figure 13 - Location of Wi-Fi Antennas

Installing the Wi-Fi Antennas

1. Locate the two Wi-Fi antenna connectors on top of the Vidyo CLINiC chassis. These are adjacent to the left and right infrared illuminators.



Figure 14 - Installing Wi-Fi Antenna

2. Install the two supplied Wi-Fi antennas by aligning them with the threaded mating connectors on top of the Vidyo CLINiC chassis and gently screw them into place.

Getting Started

Powering On and Off

Connect any required peripherals to the Vidyo CLINiC before connecting to AC power.

Powering on the Vidyo CLINiC

To power on the Vidyo CLINiC:

Connect the Vidyo CLINiC to AC power. This will automatically power on the integrated computer, camera and display of the Vidyo CLINiC. A splash screen will be displayed within several seconds.

Waking Up the Vidyo CLINiC

The system goes to sleep after 10 seconds with no activity. This value can be changed from the **Settings** menu of the VidyoRoom administrator user interface (Admin UI) *To* wake up the Vidyo CLINiC:

The Vidyo CLINiC will automatically wake up on receipt of an incoming call, or by pressing any button on the controller.

Powering Off the Vidyo CLINIC

Powering off the Vidyo CLINiC is typically unnecessary. Most video endpoints remain connected to the network and in stand-by mode until a call is placed or received. However, you may need to power off the Vidyo CLINiC if you need to move it to a different room.

To power off the Vidyo CLINiC:

Disconnect the Vidyo CLINiC from AC power.

Restarting the Vidyo CLINiC

You can restart the Vidyo CLINiC by powering off and powering on the Vidyo CLINiC.

Connecting to the Network

Before you can make and receive video calls with the Vidyo CLINiC, you must connect the unit to the network. There are two ways you can connect to the network: using the integrated Wi-Fi with external antenna, or using the 10/100/1G Ethernet port.

To connect the CLINiC to a Wi-Fi network, please refer to the: VidyoRoom and VidyoPanorama 600 Administrator Guides and VidyoRoom SE Deployment Guides

 $\underline{https://support.vidyocloud.com/hc/en-us/articles/218145337-VidyoRoom-and-VidyoPanorama-600-Administrator-Guides-and-VidyoRoom-SE-Deployment-Guides}$

Vidyo CLINiC Software Set Up & Administration

The CLINiC is supplied as standard with a Windows 10 Pro operating system and VidyoRoom SE software application version 20.3.xx, or later. For further set up details on the CLINiC, please refer to "SE Installation Guide" and the "VidyoRoom Software Edition Deployment Guide". These documents includes links to all set up details of the Vidyo software application installed in your system. This document can be accessed at:

https://support.vidyocloud.com/hc/en-us/articles/218145337-VidyoRoom-and-VidyoPanorama-600-Administrator-Guides-and-VidyoRoom-SE-Deployment-Guides

Configuring the Application Mode

The Admin UI Settings tab allows the system application mode to be set as either Kiosk or Appliance:

- Kiosk mode prevents the VidyoRoom application from modifying the OS and allows users to exit the app from the OnScreen UI. This mode is the default
- Appliance mode will lock down the system by preventing Windows updates from automatically occurring, disables certain Windows notifications, creates inbound firewall rules for sharing, disables some special keys on the keyboard, hides the Task Bar, and more. (Refer to: VidyoRoom_AdminGuide_19.3.0.pdf, or later)

Configuring the System Controller

The default set up within the Admin UI for correct operation of the system controller is shown below. Any changes to this configuration will result in the control keys malfunctioning.

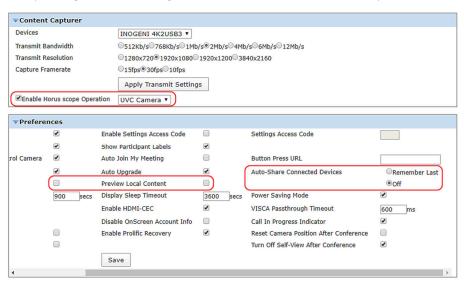


Figure 15 - System Controller Admin UI Default Settings

Appendix #1: System Controller Functions

A tethered hand held controller is supplied as standard with the Vidyo CLINiC, which can be used to control and select standard system functions, including; make and receive calls, controlling the camera, volume and all other functions that may be required during a call between one or more sites.

The operational controls are depicted below with an explanation of the operational usage of each. Several of the functions incorporate an on screen icon which is displayed in the top right hand corner of the screen;



There are three types of on screen icons used:

Mute Functions:

Audio and Video Mute icons are displayed in Red when either of these functions are active:



Source Input Functions:

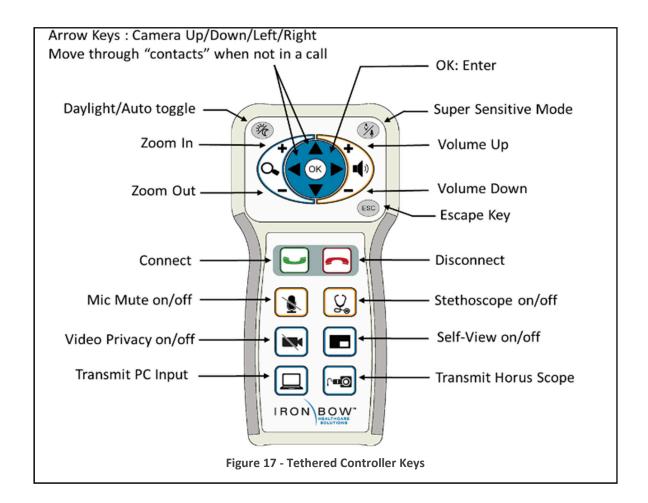
The system incorporates three source functions for external (client supplied) devices; PC or HDMI Video Source, Horus Scope, and electronic stethoscope. When these devices are connected and available, a white icon for each appears, when transmission is active a green icon is displayed: (The stethoscope icon is always displayed as available)



System Functions:

System functions are available for camera Infra-Red (Nighttime) operation as well as putting the audio system into a Super Sensitive Mode:







The Arrow keys control camera up/down/left/right movement when the system is in a call When the system is not in a call, the arrow keys are used to move through the Vidyo on screen contacts directory



When the system is in a call, the camera zoom in and out functions are controlled by the + and - signs



When the system is in a call, the volume functions are controlled by the + and - signs. A volume indicator bar is displayed on the bottom of the screen indicating the volume level



The ESC (Escape) key is available to remove any unwanted system or network messages that can be automatically displayed by the network e.g. "New software update available"

Camera infra-red operation has two states: (Daylight/Auto)



State #1: Default State: Daylight operation

State #2: Auto.

When you click the infra-red button the Preview (self-view) will display the infra-red icon either as Daylight or Auto and you can toggle between modes for up to 15 seconds. If the system is in a call, the IR mode will display on its own.



Super Sensitive Mode removes all of the audio filtering allowing every noise in the room to be heard at the remote site(s), which may be required when listening for a specific sound or audio tone.



The **Connect** control is used to make a call and accept an incoming call. The arrow can be used to move through the Vidyo on screen contacts directory and the by selecting the green call button a call is a launched to the selected location. If the system is not in auto-answer, the connect key is used to accept an incoming



The **Hang Up** control is used to end a call. If the system is not in auto answer mode, then the Hang Up control can be used to reject an incoming call from a remote site.



Microphone Mute selection stops the room audio from being transmitted to the remote site. A second selection resumes the audio transmission. This control does not affect transmission of an electronic stethoscope.



The **Stethoscope** control transmits the audio output from a connected electronic stethoscope to the remote location. On selection, the local room microphones are automatically muted to ensure the stethoscope audio can easily be heard at the remote site without any background room noise. When the stethoscope is turned off, the room microphones are automatically activated

Electronic Stethoscope Notes: A digital Stethoscope with a 3.5 mm line output (e.g. the JEDMED Omni Scope) can be used with the system. The installed version of Vidyo software supports the higher quality Opus audio algorithm which will only function if the remote codec uses the same audio algorithm.

For Opus audio to operate the VidyoPortal & VidyoRouter must use software version 18.4.0 or later. If any of these criteria are not met, the overall system will revert to using the lower quality Speex audio algorithm.



Camera Mute selection stops the image from the system main camera being transmitted to the remote site. A second selection resumes the camera transmission. This control does not affect transmission of ancillary devise connected to the system such as a PC or Horus Scope.



The **Self View** control is used to obtain an on screen view of the image from the main system camera which can be switched on or off by this control.



Transmit PC sends the image from a connected PC or HDMI device to the remote site as a second image in conjunction with the main system camera. The image will automatically be shown as a window on the main screen. To end transmission, select the control again or select the Horus Scope key, which will replace the PC image with the Horus Scope image.



Transmit Horus Scope sends the image from a connected Jed Med USB Horus Scope to the remote site as a second image in conjunction with the main system camera. The image will automatically be shown as a window on the main screen. To end transmission, select the control again or select the transmit PC key, which will replace the Horus Scope image with the PC image.

Appendix #2: Mounting Information

The following diagrams are not to scale and are provided for dimensional information only.

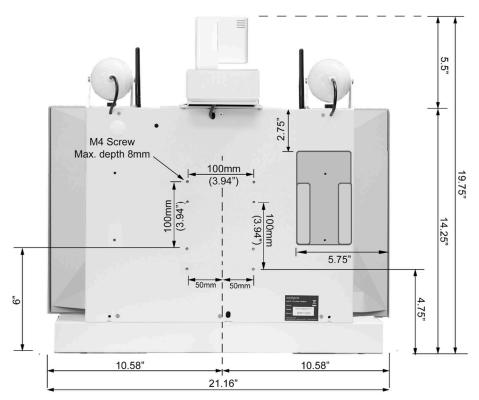


Figure 18 - System Dimensions



- Sound Deflector Dimensions
- Rear Controller Cradle Depth

Specifications

Display	
Туре	23.8" IPS LED
Native Resolution	1920 x 1080
Viewing Angle H/V	178°/178°
Control	
Remote Control	Tethered Remote Controller
Control Port	DB9 expansion control port (for future use)
Keyboard/Mouse	For installation a keyboard, mouse and USB hub required (end user supplied)
Video Input/Output	
Input	Iron Bow IBHC-04 camera 10x optical/10x digital zoom
	1 x HDMI Video Input (Designated for external PC connection)
	1 x USB3 Port (Designated for external Horus Scope connection)
Output	1 x Display port (dedicated to display)
Audio Input/Output	
Input	Integrated beam-forming quad microphone array
	1 x 3.5 mm Audio Input for Electronic Stethoscope
Output	Integrated stereo speakers; 2 x 5 Watts
Network	
	1 x 10/100/1G Ethernet & Realtek Dual Band 802.11 a/b/g/n/ac Wi-Fi
Dimensions/Weight	
WxHxD	21.16" x 19.75" x 4.25" (Excludes Sound Deflector & Rear Cradle)
Accessories	Sound Deflector: 1.25" High
	Rear Controller Cradle: 1.25" Deep
Weight	23 pounds
Mounting	
	Compatible with 100mm x 100mm VESA mounts (refer to Appendix)
Electrical	
	Auto Sensing Power Supply: 110-120VAC ~60Hz, 1.67A
·	



2303 Dulles Station Boulevard, Suite 400 Herndon, VA 20171

> Toll: 800.338.8866 Tel: 703.279.3000

www.ironbowhealthcare.com