EXPANDING THE Boundaries of Healthcare

Iron Bow MedView[™] Installation and User Guide

For use with MedView Model Number:

MEDVIEW-V-10X-A01

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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. the 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.

	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

- 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.
- 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-BriteTM 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 MedView:

- Chassis cleaning
 - 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.
 - 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
- Camera body (not the lens)
 - 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.
 - Branded, ammonia-free LCD cleaning products
 - Zeiss Pre-Moistened Lens Cleaning Wipes
 - CloroxPro Clean Screen Wipes
 - Up to 50:50 isopropyl alcohol to distilled water mixture for general cleaning, using soft microfiber cloth
 - Use 70:30 isopropyl alcohol and distilled water mixture for infection control, using soft microfiber cloth
- Camera Lens
 O Use
 - 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, do not 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 the top of a display using the optional mounting bracket system, or can be wall or ceiling mounted using the system base attachment points and suitable third party brackets / mounts. Care should be taken to ensure that any supporting device is fir for purposes and is capable of supporting the weight of the system and any attached peripherals/cables.

Connecting Peripheral Equipment

It is recommended that an AC isolation transformer is used if the system is to be used with any external peripheral that may have direct skin contact. 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)
- ➢ Operating humidity: 20%−80% (RH)
- ▶ Non-operating temperature: -20°C -60°C
- ▶ Non-operating humidity (non-condensing): 10%–90%

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Introduction

The MedView family of products from Iron Bow Healthcare Solutions consists of purpose-built telehealth devices that integrate with existing in-room equipment to enable the delivery of clinical healthcare from a distance.

This user guide covers the assembly and installation of the Iron Bow MedView, part # MEDVIEW-V-10X-B01. For Administration and Configuration of the Iron Bow MedView, refer to the *VidyoRoom™ and VidyoPanorama™ 600 Administrator Guide:*

<u>VidyoRoom and VidyoPanorama 600 Administrator Guides and VidyoRoom SE Deployment</u> <u>Guides</u>

This MedView 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 and dual infrared illuminators for nighttime or darkened room operation. The Integrated sound system incorporates a quad beamforming microphone array plus a full spectrum echo canceller, twin channel audio amplifier and dual speakers.

The MedView incorporates a standard VESA mounting hole pattern for installation on common wall mount brackets, or on room displays utilizing optional VESA mounting support brackets



Figure 1 - MedView with Integrated Sound Bar

You can find additional MedView resources, support information and other related telehealth services at <u>www.ironbowhealthcare.com</u>.

System Description

The primary components of the Iron Bow MedView are shown below:



Accessories included with MedView

- Cat 5e cable, 6'
- DisplayPort to HDMI cable, 3', blk
- Power cord, NEMA 5/15P to C13, 6ft, blk
- MedView user guide

System Installation

The MedView is designed to be mounted on an existing wall arm that is already supporting a monitor using the monitor VESA mounting hole pattern. Iron Bow sells adapter plates to allow for mating the MedView with the VESA mount. Each mount uses the smaller mounts as base components.

The customer is responsible for ensuring that the maximum weight (Medview plus Monitor) can be supported by the existing wall mount.

Part Number	Description
MEDVIEW-BRKT100-A01	100 x 100 pattern
MEDVIEW-BRKT200-A01	100 x 200 or 200 x 200 pattern
MEDVIEW-BRKT400-A01	300 x 300 or 400 x 400 pattern

Some VESA combinations of monitor and Wall Mount are not recommended. See this table for required brackets.

Monitor	Mount	Brackets	
100x100	100x100	MEDVIEW-BRKT100-A01	
		VideoSecu ML20B bracket recommended	
100x100	200x200	n/a 2	
100x200 or	100x100	n/a ²	
200x200			
100x200 or	200x200	MEDVIEW-BRKT200-A01	
200x200			
200x200	400x400	MEDVIEW-BRKT400-A01	
400x400	200x200	MEDVIEW-BRKT400-A01	
		Additional M6 or M8 Nuts required	
400x400	400x400	MEDVIEW-BRKT400-A01	

¹ Adapter allows the assembled MedView and brackets to slide onto a wall mount. Many wall mounts already have this feature. Check your existing wall mount to see if this bracket is desirable.

² Options are not possible without customization of the brackets or use of an adapter plate

Assembly on a monitor

Attach the MedView to the MEDVIEW-BRKT100-A01 bracket

1. Position the MedView so it is facing down, with the hole pattern on the bottom exposed.

DO NOT REST THE UNIT ON THE CAMERA

- a. Attach the MedView to the MEDVIEW-BRKT100-A01 bracket using the (2) M4x8 Phillips flathead screws and/or the (1) ¼-20 x 3/8" flathead screw.
- b. The unit can be adjusted forward and back to suit the situation, with 4 sets of holes available for positioning. Use the (2) M4 flathead screws to lock the MedView parallel to the monitor face.
- c. If it is necessary to install the MedView so it it not parallel to the monitor face, the ¼-20 screw can be used alone and will allow the unit to be angled as needed.



Figure 3 - Assemble MedView to Bracket

Attach the MedView/MEDVIEW-BRKT100-A01 bracket assembly to the Monitor

- 1. Place the monitor face down on a table being sure to protect the front face from scratches or damage.
- 2. Position the (4) spacers over the VESA mount holes in the monitor. If the rear of the monitor is flat, and nothing prevents the bracket from mounting flat to the surface, the spacers are not necessary.
- 3. Position the MedView and bracket on top of the spacers (on the monitor) so the VESA hole patterns line up.
- 4. Position the Angled half of the ML20B bracket as shown, aligned with the VESA hole pattern.
- 5. Secure the bracket to the monitor using the screws provided.
 - a. Use the (4) M4x25 Phillips pan head screws to secure the bracket to the monitor.
 - b. If <u>no spacers</u> are used, use the (4) M4x18 Phillips pan head screws to secure the bracket to the monitor.



Assemble MEDVIEW-BRKT200-A01 to a Monitor

- 1. Follow the previous instructions for <u>attaching the MedView to the MEDVIEW-BRKT100-A01</u> bracket.
- 2. Place the monitor face down on a table being sure to protect the front face from scratches or damage.
- 3. Position the MedView/MEDVIEW-BRKT100-A01 assembly over the monitor. Locate the MEDVIEW-BRKT200 bracket so the slots align with one of the set of (3) 10-32 threaded holes in the BRKT100 bracket while the bracket slots align with the monitor holes.
- Secure the BRKT200 to the BRKT100 plate using the (3) 10-32 x 3/8 phillips pan head screws and (3) #10 washers.
- 5. Secure the bracket assembly to the monitor using M6 or M8 pan head screws. With spacers, use 25mm long screws, and 16mm without spacers.



Figure 5 - Add bracket for 200 x 200 Mount

Assemble MEDVIEW-BRKT400-A01 to a Monitor

- 1. Follow the previous instructions for attaching the MedView to the MEDVIEW-BRKT100-A01 bracket.
- 2. Place the monitor face down on a table being sure to protect the front face from scratches or damage.
- 3. Position the MedView/MEDVIEW-BRKT100-A01 assembly over the monitor.
- Locate the MEDVIEW-BRKT200 bracket so the 200x200 hole pattern is centered on the monitor. <u>The counterbore</u> pockets must be facing away from the BRKT100 bracket.
- 5. Align the slots in the bracket with one of the set of (3) 10-32 threaded holes in the BRKT100 bracket.
- Secure the BRKT200 to the BRKT100 plate using the (3) 10-32 x 5/16 phillips pan head screws and (3) #10 washers.
- Attach the (2) MEDVIEW-BRKT400-A01 bracket arms to the BRKT200 bracket using the (4) 10-32 x 5/16 flathead screws.
- Secure the bracket assembly to the monitor using M6 or M8 pan head screws. With spacers, use 25mm long screws, and 16mm without spacers.



Figure 6 - Counterbore hole detail view



Figure 7 - Add bracket for 400 x 400 mount

Assembly on a security camera mount (without an attached monitor)

While not common, the MedView can be mounted to a ¼-20 threaded video camera mount. A non-rotation pin hole is included in the MedView base plate.

/	c	>	0	
	1/4-20 Threaded Hole and Alignment Pin hole			
	c		0	

Figure 8 - Assemble MedView on a post mount

Connections



Wi-Fi Network

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

Installing the Wi-Fi Antennas

1. Attach the two Wi-Fi antenna supplied with the unit to the MedView chassis as shown. They should be easily threaded onto the exposed connector. Do not overtighten.



Figure 10 - WiFi antenna assembly

Connecting to the Monitor

If the <u>monitor supports prioritization of inputs</u>, then the DisplayPort/HDMI output from the MedView can often be connected directly to the monitor HDMI input. Customer will need to configure the monitor to respond as desired to the different inputs. See an Iron Bow Applications engineer to review your specific conditions.

If the <u>monitor does not provide input prioritization</u>, then a governing switch will likely be required. See the ACC-HDMISWITCH-A01 priority switch below for an example.

Non-HDMI monitor inputs will likely require upscalers or converters to transition from one technology to another. See the Iron Bow Application engineer for assistance.



Figure 11 - HDMI switch example

Getting Started

Powering On and Off

Connect any required peripherals to the USB ports of the MedView before connecting the MedView to AC power.

Powering On the MedView

To power on the MedView:

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

Waking Up the MedView

The system goes to sleep after a set period with no activity. This value can be changed from the **Settings** menu of the VidyoRoom administrator user interface (Admin UI)

To wake up the MedView:

• The MedView will automatically wake up on receipt of an incoming call, or by pressing any button on the infrared remote control.

Powering Off the MedView

Powering off the 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 MedView if you need to move the MedView to a different room.

To power off the MedView:

• Disconnect the MedView from AC power.

Restarting the MedView

You can restart the MedView by powering off and powering on the MedView.

Connecting to the Network

Before you can make and receive video calls with the MedView, 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 MedView to a Wi-Fi network, please refer to *VidyoRoom™ and VidyoPanorama™ 600 Administrator Guide:*

<u>VidyoRoom and VidyoPanorama 600 Administrator Guides and VidyoRoom SE Deployment</u> <u>Guides</u>

MedView Software Set Up & Administration

The MedView is supplied as standard with a Windows 10 Pro operating system and VidyoRoom SE software application versions 19.3.xx, or later. For further set up details on the VMedView, please refer to "VidyoRoom and VidyoPanorama 600 Administrator Guides and VidyoRoom SE Deployment Guides. This document includes links to all set up details of the Vidyo software application installed in your system. This document can be accessed at:

<u>VidyoRoom and VidyoPanorama 600 Administrator Guides and VidyoRoom SE Deployment</u> <u>Guides</u>

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)

Control Functions

There are no control functions on the MedView device itself. An administrator will typically set up the unit to auto answer at a pre-set volume. Users can purchase remote controls for the MedView that allow for in-room call and volume control.

Iron Bow Part Number	Function	
ACC-V-VOLCTRL-A01	Volume-control remote for Vidyo-based vCLINiC and MedView products. USB connection with approx. 10' coiled tether.	Incontecutive
ACC-V-REMOTE-A01	Functional remote control for Vidyo-based vCLINiC and MedView applications. USB connection with approx. 10' coiled tether.	

For more information on the MedView remote controls, refer to the <u>Iron Bow Remote Control User</u> <u>Guide</u> available at <u>https://ironbowhealthcare.com</u>.

Appendix #1: Specifications

The following diagram is not to scale & is provided for dimensional information only.



Figure 12 - MedView Dimensions

Specifications

Product Family	MedView Telehealth Videoconferencing		
Part Number	MEDVIEW-V-10XIR-A01 – for VidyoRoom SE applications		
	MEDVIEW-V-10XIRC-A01 – for VidyoConnect cloud applications		
Videoconferencing	Vidyo VidyoRoom SE software (on-premise applications)		
software options	Vidyo VidyoConnect VCC-100 software (cloud applications)		
Computer	Low Profile Fanless Intel Core i5 Industrial Computer		
	Intel Core i5-6300U, dual-core @ 2.4 GHz 8 GB memory @ 2133 MHz		
	128B mSATA SSD		
Camera	10X Optical/ 10x Digital PTZ		
	Infra-red for nighttime operations		
	58 cm – infinity depth of field		
	1920 x 1080 resolution at 30 fps		
Display	N/A – uses the existing in-room infotainment display		
Control	Customer provided keyboard (USB)		
	Optional Iron Bow ACC-V-REMOTE-A01 tethered remote control (USB)		
	Optional Iron Bow ACC-V-VOLCTRL-A01 tethered remote volume control (USB)		
Video Inputs	1x - Main Camera (Integrated)		
Video Output	2x DisplayPort (#1-Dedicated to Display; #2-not used)		
Audio Input	1x 4 microphone array (integrated) w/ beamforming, echo and noise cancellation		
Audio Output	2x Integrated Neodymium Speakers		
Other Inputs	4x – USB 3.0 ports		
Network	2x 10/100/1G Ethernet ports		
	Realtek Dual-Band 1x1 802.11a/b/g/n/ac with 108mm Antennas		
Dimensions	24" Wide		
	6" High (base unit with camera); 2.5" base unit only		
TTT 1 1	7" Deep (allow additional 1.5" for cable routing on rear)		
Weight	10.5 lbs. (MedView without bracket)		
Mounting	¹ / ₄ -20 threaded hole for video camera post mount		
	Available MedView Brackets		
	MEDVIEW-BRKT100-A01 adapter bracket for existing 100x100 VESA mount MEDVIEW-BRKT200-A01 adapter bracket for existing 200x200 VESA mount		
	MEDVIEW-BRKT200-A01 adapter bracket for existing 200x200 VESA mount MEDVIEW-BRKT400-A01 adapter bracket for existing 400x400 VESA mount		
	The view biller to refugeer stacket for existing took too vester mount		
Electrical	Integrated Auto Sensing Power Supply (100-240 volt 50/60 Hz, 1.3-0.6A)		
	1 x IEC Type Inlet		

Specifications are subject to change without notice

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