

Teladoc Health[®]
Lite[®] 4
with Boom Camera
User Guide

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Patent(s):

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Last updated: August 2023

Safety Instructions

Users of the system require clinical judgment and experience to review and interpret the patient data transmitted.

Notes, Cautions and Warnings

The types of safety instructions are:

NOTE: Supplementary information to facilitate the operation of the system.

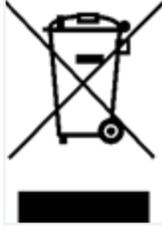
CAUTION: Instructions for avoiding damage to the system.

WARNING: Information may prove hazardous to the safety of a person near the Teladoc Health Patient Access device.

Safety Symbols

Symbols appearing on the Patient Access device and other equipment are defined in the table below.

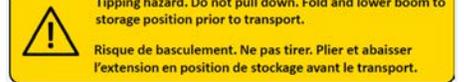
<p>Wireless Transmitter Notification: Non-ionizing electromagnetic radiation. This device communicates over the 802.11 ac/a/b/g/n standard for wireless communication.</p>	 A black square icon with a white silhouette of a person's head and shoulders, with three curved lines radiating from the head, representing wireless communication.
<p>Pinch Point: Avoid the labeled pinch point on the rear of the display of your device. Avoid the labeled pinch point between the camera and the first boom joint when the boom is folded to a storage position. Note: The only devices with a boom are the Vantage and Lite 4.</p>	 A yellow triangular warning sign with a black border. Inside the triangle, there is a black silhouette of a hand being pinched by a mechanical arm, with three curved lines indicating the point of contact.

<p>Do Not Dispose of in Household Waste: This symbol explains that you should not place the electrical item in the general waste.</p>	
<p>Body Float: Type B. A Type B piece of equipment is one that provides a particular degree of protection against electric shock, particularly regarding allowable leakage current and reliability of the protective earth connection (grounding).</p>	
<p>Manufacturer : This symbol shall be accompanied by the name and address of the manufacturer.</p>	
<p>Country of Manufacture: To identify the country of manufacture of products. CN = China as country of manufacture.</p>	
<p>Consult Operator's Manual: Operating Instructions are contained in a separate instruction manual.</p>	
<p>Do not push or lean: Do not push on cart when it is prevented from lateral movement by an obstruction.</p>	

CE Label: On commercial products, the letters CE mean that the manufacturer or importer affirms the good's conformity with European health, safety and environmental protection standards.



Tipping Hazard: Do not pull down on the Boom. Fold and lower the Boom to storage position to transport. Note: The only devices with a boom are the Vantage and Lite 4..



Proposition 65: State of California: The law requires California to publish a list of chemicals known to cause cancer or reproductive toxicity, and for businesses with 10 or more employees to provide warnings when they knowingly and intentionally cause significant exposures to listed chemicals.



WARNING: This product can expose you to chemicals including Diisononyl Phthalate, which is known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Electromagnetic Compatibility - Guidance and Manufacturer's Declaration

The Teladoc Health system complies with IEC 60601-1-2 4th edition, General Requirements for Safety—Collateral Standard: Electromagnetic compatibility. Performance of the device is unaffected by exposure to the compliance levels described in Tables 1,2,3 and 4 in the following section.

Special precautions and installation information for the Lite 4 with Boom Camera for electromagnetic compatibility (EMC) are provided below:

- Equipment in hospital environments, including the Lite 4 with Boom Camera and other portable or mobile communications equipment, can produce Electromagnetic Interference (EMI), which may affect the function of these devices. Such effects are prevented by use of equipment with EMI characteristics proven below recognized limits, as identified in the tables below.
- In the event of suspected interference from other equipment, which prevents the proper functioning of the Lite 4 with Boom Camera, contact Teladoc Health and discontinue use of the system until the problem can be remedied.

The following tables contain the Manufacturer’s declaration and additional information required by IEC 60601-1-2.

Table 1: Electromagnetic Emissions

The Lite 4 with Boom Camera is intended for use in the electromagnetic environment specified below. The customer or the user of the Lite 4 with Boom Camera should assure that it is used in such an environment.		
Emissions Test	Compliance	Electromagnetic Environment
RF Emissions CISPR 11	Group 1	The Lite 4 with Boom Camera 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 Lite 4 with Boom Camera 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.
RF Emissions CISPR 32		
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations / Flicker Emissions IEC 61000-3-3	Complies	

Table 2: Electromagnetic Immunity

The Lite 4 with Boom Camera system is intended for use in the electromagnetic environment specified below. The customer or the user of the Lite 4 with Boom Camera should assure that it is used in such an environment.

CAUTION: An ESD event may cause the system to lose functionality for a short amount of time. If the event does not recover automatically, power cycle the device.

Immunity Test	EC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
Electrostatic Discharge (ESD) IEC 61000-4-2	±8 kV Contact ±15 kV Air	±8 kV Contact ±15 kV Air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical Fast Transient / Burst IEC 61000-4-4	±2 kV for Power Supply Lines ±1 kV for Input / Output Lines	±2 kV for Power Supply Lines ±1 kV for Input / Output Lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV Line(s) to Line(s) ±2 kV Line(s) to Earth	±1 kV Line(s) to Line(s) ±2 kV Line(s) to Earth	Mains power quality should be that of a typical commercial or hospital environment.
Voltage Dips, Short Interruptions, and Voltage Variations on Power Supply Input Lines IEC 61000-4-11	<5% UT (>95% dip in UT) for 0.5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (30% dip in UT) for 25 cycles <5% UT (>95% dip in UT) for 5 sec	<5% UT (>95% dip in UT) for 0.5 cycle 40% UT (60% dip in UT) for 5 cycles 70% UT (30% dip in UT) for 25 cycles <5% UT (>95% dip in UT) for 5 sec	Mains power quality should be that of a typical commercial or hospital environment. If the user of the device requires continued operation during power mains interruptions, it is recommended that the Lite 4 with Boom Camera be powered from an uninterruptible power supply (UPS) or a battery.
Power Frequency (50/60 Hz) Magnetic Field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.

U_T is the a.c. mains voltage prior to application of the test level.

Table 3: Electromagnetic Immunity

Lite 4 with Boom Camera is intended for use in the electromagnetic environment specified below. The customer or the user of a Lite 4 with Boom Camera should assure that it is used in such an environment.

Immunity Test	EC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
Conducted RF IEC 61000-4-6 Radiated FR IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 6V in ISM bands between 150kHz and 80MHz 3 V/m 80 MHz to 2.5 GHz	3 Vrms 150 kHz to 80 MHz 6V in ISM bands between 150kHz and 80MHz 3 V/m 80 MHz to 2.5 GHz	Portable and mobile RF communications equipment should be used no closer to any part of the Lite 4 with Boom Camera , including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance: $d = 1.2 \sqrt{P}$ $d = 1.2 \sqrt{P}$ $d = 2.3 \sqrt{P}$ where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey ^a , should be less than the compliance level in each frequency range ^b . Interference may occur in the vicinity of equipment marked with the following symbol: 

80 MHz to 800 MHz
800 MHz to 2.5 GHz

NOTES:

- At 80 MHz and 800 MHz, the higher frequency range applies.
- These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

CAUTIONS:

- Momentary video loss may occur in the presence of a 380MHz wireless signal.
- Audible tones may be heard when the device is in close proximity with equipment emitting 24-30MHz electromagnetic radiation. In this case, please move the device to another location, or call technical support for assistance.

a. Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the Lite 4 with Boom Camera is used exceeds the applicable RF compliance level above, the Lite 4 with Boom Camera should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the Lite 4 with Boom Camera.

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

Table 4: Recommended separation distances

Recommended separation distances between portable and mobile RF communications equipment and the Lite 4 with Boom Camera.

The Lite 4 with Boom Camera is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the Lite 4 with Boom Camera can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the Lite 4 with Boom Camera as recommended below, according to the maximum output power of the communications equipment.

Rated Maximum Output Power of Transmitter (W)	Separation distance according to frequency of transmitter (m)		
	150 kHz to 80 MHz $d = 1.2 \sqrt{P}$	80 MHz to 800 MHz $d = 1.2 \sqrt{P}$	800 MHz to 2.5 GHz $d = 2.3 \sqrt{P}$
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

NOTES

1. At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
2. These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Virtual Care System

Health systems view virtual care as an extension of their services, relying on a combination of software, hardware, networks, systems and people to work together to deliver improved access and care to their patients.

Enabling healthcare's only integrated virtual care platform, Teladoc Health powers virtual encounters at clinics, healthcare facilities and patient homes for an integrated experience across a multitude of use cases. Built on our cloud-based network, Solo™ is the backbone to delivering care anywhere at any time. It provides users with everything they need to streamline their telehealth needs for fast user adoption.

Designed for healthcare, security and reliability

Our cloud-based, patented network ensures the industry's highest standards for protecting and securing sensitive healthcare information. Our downloadable and web-based platform allows users to access virtual care across a broad range of consumer and telehealth devices in a variety of clinical environments.



Intended Application

The Lite 4 with Boom Camera is intended to provide high quality Privacy compliant audio and video sessions between a provider and a patient over the Teladoc Health Telehealth Network in a variety of clinical environments.

Lite 4 with Boom Camera Anatomy and Components



1	Directional Microphone	Used to pick up audio in a narrow zone.
2	Dual High-Definition Cameras	Captures remote video for viewing on the Provider Access Software.
3	Touch Sensitive Display	Enables local controls and shows Provider Access Software user's face.
4	Battery Charging Status	Displays the power and charging status of the Lite 4 with Boom Camera .
5	Expansion Panel	Includes ports for approved USB peripheral devices, HDMI output, optional HDMI input, and Ethernet.
6	Tray	Work surface for a laptop or other items.
7	Handle	Easily maneuver the Lite 4 with Boom Camera .
8	Power Cord	Used to power the Lite 4 with Boom Camera and recharge the battery.
9	Storage Compartment	Holds miscellaneous items.
10	Wheel Locks	Locks each wheel in place when stationary (four wheels).
11	Air Vents	Air vents help maintain a safe operating temperature for the device. (Do not cover)
12	Back of Touch Display	Power button and additional USB ports.
13	Serial Number Plate	Contains the device's serial number and support contact phone number.
14	Power Button	Used to toggle the power for the Lite 4 with Boom Camera .
15	Privacy Handset	Used for conversations requiring privacy or intelligibility in loud environments.
16	Device Nameplate	Nameplate detailing the device's serial number and regulatory information.

17	Speakers	Used during sessions to hear the person connected to the device.
18	Boom Camera	Allows for an additional, unobstructed view of the patient from above. (Do not touch) .
19	Boom Handle	Used to adjust the Boom arm.
20	Boom	Adjust Boom Camera to extend above the patient.

Lite 4 Features

Adjusting the Head Height on a Lite 4 with Boom Camera

The Lite 4 with Boom Camera head can be placed between 64.5" and 85.5" off the floor by raising or lowering the head up or down to the desired height.



Adjusting the Boom

Directions:

1. Ensure that the Lite4with Boom Camera wheels are locked.
2. Set the Head to its lowest position – See "[Lite 4 Features](#)" above.
3. Use the boom handle to move and extend the Boom to the desired position.

NOTES:

- The Lite4with Boom Camera can be extended up to 48".
- The boom arms can fold either direction, and has stops to prevent collision.



CAUTIONS:

- Avoid touching the Boom Camera.
 - If user touches Boom Camera, it can become out of calibration. It will automatically re-calibrate nightly, or can be reset manually using Provider Access Software > access the boom mounted camera and select Reset.
- Observe the overhead boom when moving or adjusting the position of the Lite 4. Overhead objects such as lights, can be damaged by unexpected collisions.
- Do not pull down or place any objects on the boom, especially when the boom is extended.
- Avoid the labeled pinch points on the Lite 4, especially when operating the lifting mechanism, when extending or folding the boom, and during remote sessions when the Lite 4 head and the boom camera can be moved by a remote user.
- The Lite 4 is not being provided sterile and any potential peripherals attached to the Lite 4 may need to be sterilized prior to use.

Lite 4 Boom Camera Image Adjustment

To adjust the glare (white-out), follow the instructions below.

1. Tap or click on the screen and select the  icon.
2. Select the Boom Camera, unless already selected.
3. Press the **Menu** button () on the camera to view the **Main Menu** setting on the video feed.

Select an Adjustment Value

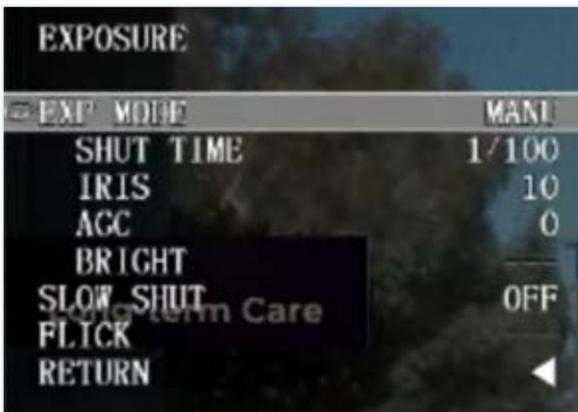
- Use the Up or Down arrow buttons below to navigate the **Menu**.
- Use the Left or Right arrow buttons to select or change a value.





4. Navigate to Exposure

- Change **EXP MODE** (exposure mode) to **MANU**(manual).
- Decrease the **IRIS** value to reduce the amount of glare.
- If needed, decrease the **SHUT TIME** (shutter time) value to reduce the glare.



5. Exit

- Press the **Menu** button  on the remote camera to exit.

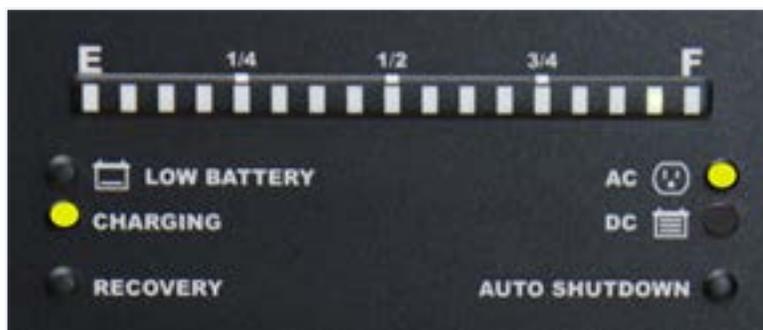
Moving the Lite 4 with Boom Camera

The Lite 4 with Boom Camera is designed to be moved by hospital staff into a broad array of locations such as clinics, emergency rooms, rural hospitals, long-term care communities and more. The requirement for operation is a grounded, hospital grade electrical outlet supplying a minimum of 100-240 VAC, 50/60 Hz, 6.5A for the Lite 4 with Boom Camera .

Prior to moving the Lite 4 with Boom Camera , and when moving the Lite 4 with Boom Camera , do the following:

- Ensure the Lite is set at its lowest position.
- Fold and lower the boom to the storage position prior to transport.
- Ensure any auxiliary devices attached to the Lite 4 with Boom Camera are unplugged.
- Ensure the power cord is unplugged and hung on the Lite 4 with Boom Camera 's handle.
- Ensure the wheels are unlocked before moving.
- Exercise caution when encountering thresholds and doorways.
- Move to the desired location.
- Lock the wheels.
- Plug in the power cord.

Lite 4 with Boom Camera Main Power - Recharging



NOTE: Teladoc Health recommends keeping the Lite 4 with Boom Camera plugged in at all times, so that it is ready for use and also to maintain battery health

The battery charge indicator is located on the Lite 4 with Boom Camera on the side of the storage compartment.

Another battery charge indicator is located in the upper right hand corner of the display and includes the percentage of the battery's charge.



- Fully charged = 100%
- A lightning bolt indicates the battery is charging

If the Lite 4 with Boom Camera is not plugged in, the power is provided from the battery.

The Battery charge lights will be lit indicating the remaining percentage of battery life whenever the Lite 4 with Boom Camera is plugged in or turned on.

If the battery charge drops below the alarm threshold, the sound-byte “**Please plug me in**” will be played at intervals until the Lite 4 with Boom Camera is plugged into AC power. Plug in the device as soon as possible.

Keep the Lite 4 with Boom Camera plugged in and left powered on at all times. Plug the Lite into a grounded “Hospital Grade” electrical outlet to minimize the risk of electrical shock during the battery charging cycle.

- The system will charge to 85% in four hours.
- The system will charge to 100% in six hours.



WARNINGS:

- If the power plug of the Lite is damaged, the Lite 4 with Boom Camera can be operated using the on-board battery system. Report this condition to Technical Service immediately for repair.
- The Lite 4 with Boom Camera contains a sealed, rechargeable, lead-acid, gel-type battery. The Lite 4 with Boom Camera should always be plugged in to avoid deep discharge cycles that can shorten the battery’s useful life. Other than keeping the battery charged by keeping the Lite 4 with Boom Camera plugged in, no user maintenance of the battery is required.

Lite 4 with Boom Camera Head Display

The Lite 4 with Boom Camera is equipped with a touch-screen. This allows the user to access the many features available on the Lite 4 with Boom Camera. For example:

- Check device status
- Manage settings
- Access the User Guide
- Personalizing the patient side user experience



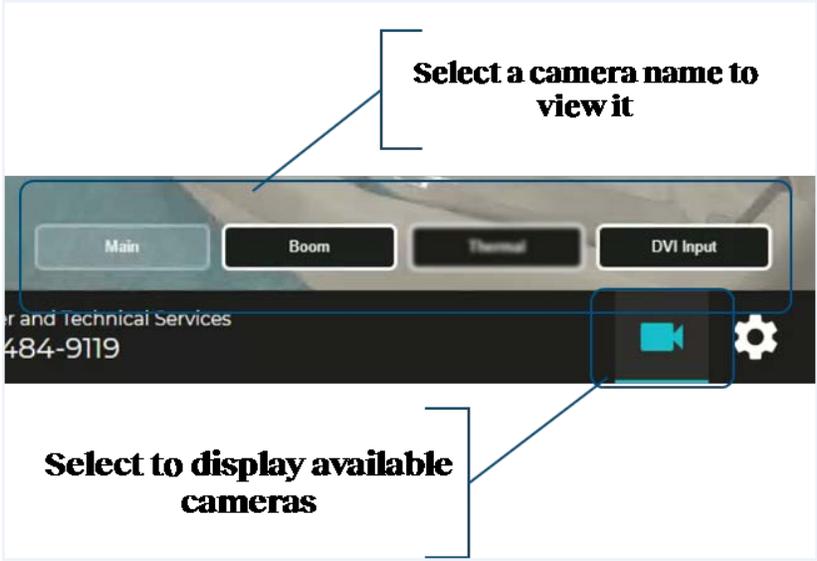
Out of Session Screen Navigation

When the Lite 4 with Boom Camera is not actively connected to the Provider Access Software, it is considered idle, and an animation will be displayed.

NOTE: Screensavers chosen by the customer may optionally be shown; to do so, consult your Teladoc Health representative or Technical Support.

Tap anywhere on the Lite 4 with Boom Camera's screen to access the available idle features.

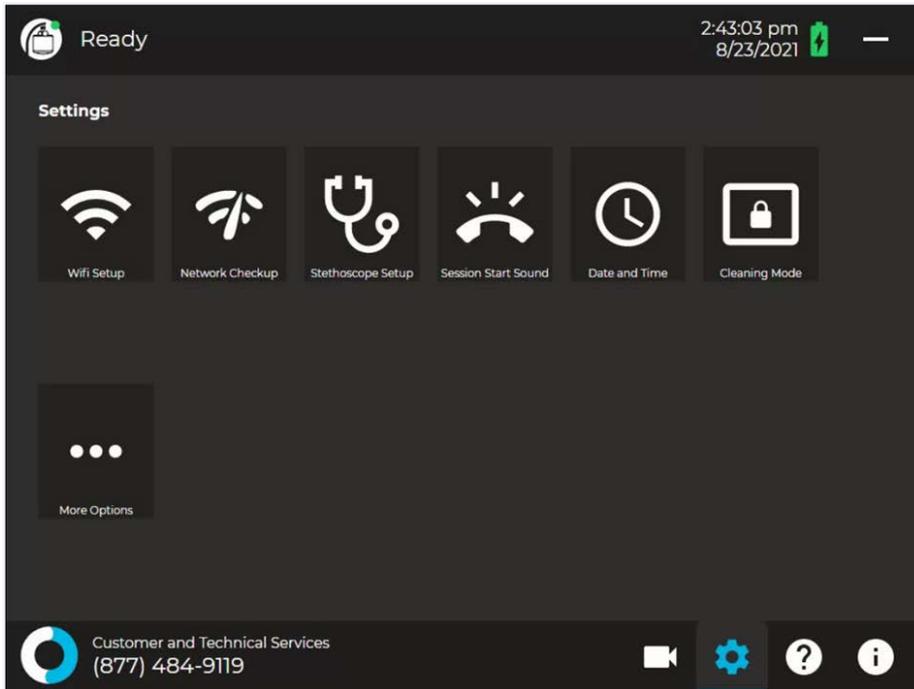


Icon	Function
	<p>Exits and returns Lite 4 with Boom Camera to idle mode.</p>
	<p>Camera Preview mode allows the local user to preview the camera image, and that of any attached video peripheral.</p> <div data-bbox="597 873 1414 1434" style="border: 1px solid gray; padding: 10px; margin: 10px 0;">  </div> <p>NOTE: The available cameras depend on what is connected to the Lite 4 with Boom Camera. If no additional cameras or devices are connected, no buttons are displayed.</p>

Icon	Function
	<p>Settings</p> <ul style="list-style-type: none"> • Wifi Setup - allows user to establish a WiFi connection on the Lite 4 with Boom Camera. • Network Check - runs a diagnostic of the current network connection. • Bluetooth Setup - allows user to connect or remove Bluetooth devices to the Lite 4 with Boom Camera. • Stethoscope Types-select an optional stethoscope (if desired). • Session Start Sound - allows the level of the session start sound to be adjusted. • Date and Time - allows user to choose date and time display on the device in and out of the virtual encounter. • Cleaning Mode - turns off the touchscreen to allow cleaning. • More Options - other device display settings.
	<p>Opens an online version of the Lite 4 with Boom Camera's User Guide.</p>
	<p>Displays Diagnostic Information -- Includes useful technical information such as:</p> <ul style="list-style-type: none"> • Serial number • Location • Battery charge • Wireless Network (SSID) and signal strength • IP addresses • Teladoc Health Telehealth Network connectivity • Device status

Lite 4 with Boom Camera Settings Screens

Tap the screen and then tap the Settings icon



Lite 4 with Boom Camera Wi-Fi Connection Setup

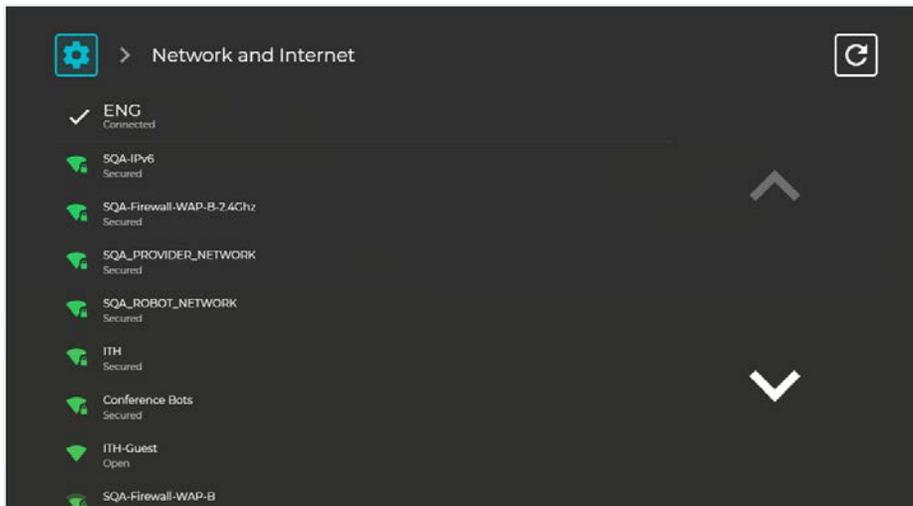
NOTES:

- Advanced Wi-Fi set up should be done only by a trained technician.

Basic Wi-Fi Setup

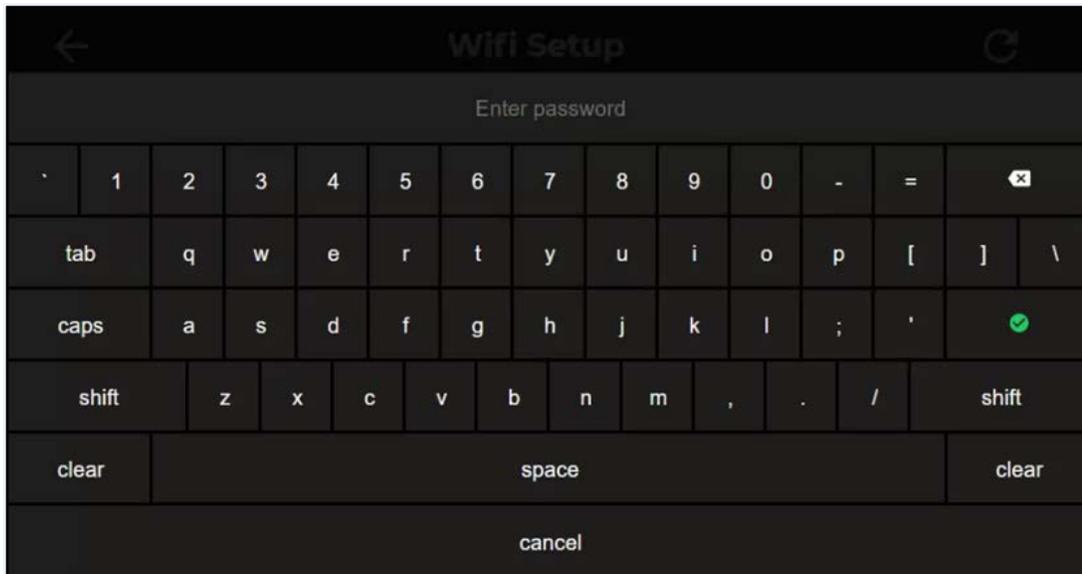
1. Select **Wi-Fi Setup**  from the Settings screen .

2. Select the desired secure, clinical wireless SSID network.



CAUTION: Guest, Staff, and VIP type networks are not suitable for connection of a third-party medical device peripheral.

3. Enter the network security key.

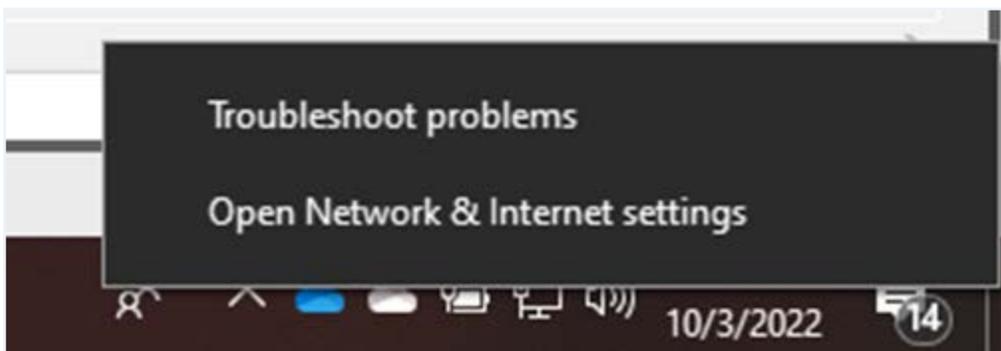


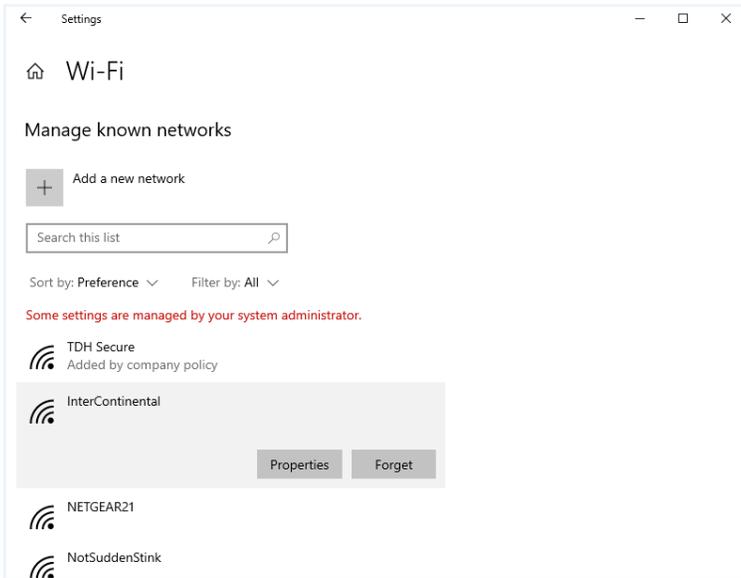
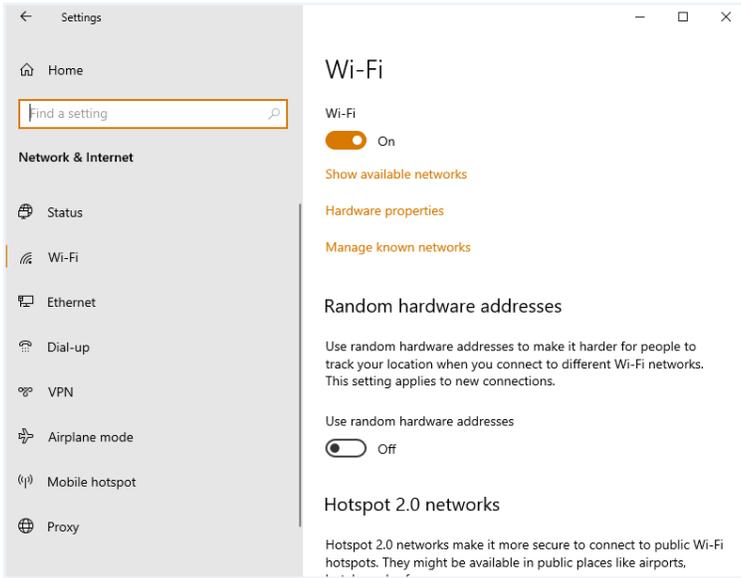
4. Use the Information Icon () on the lower right corner of the screen and ensure that the status is Ready before attempting to make a connection.

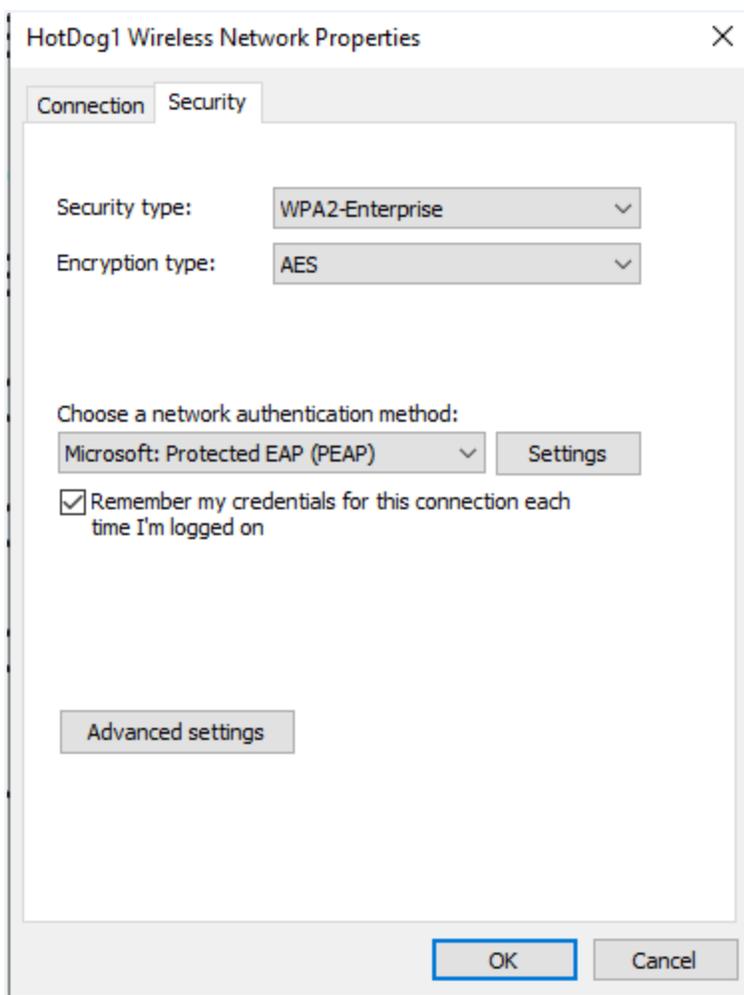
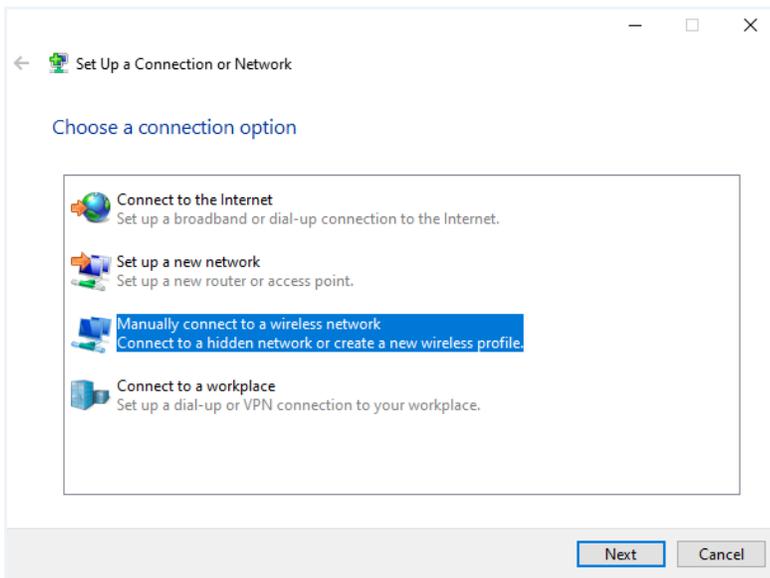
NOTES:

- The Diagnostic Information page will display current Wi-Fi status.
- The Lite 4 with Boom Camera will automatically connect to known Wi-Fi profiles. For stored Wi-Fi profiles, the password can be changed by selecting it and editing the password.

1. Press "Ctrl - Shift - Space" on the keyboard to bring up Debug mode.
2. Click the "X" at the top-right of the window to close the Robot software.



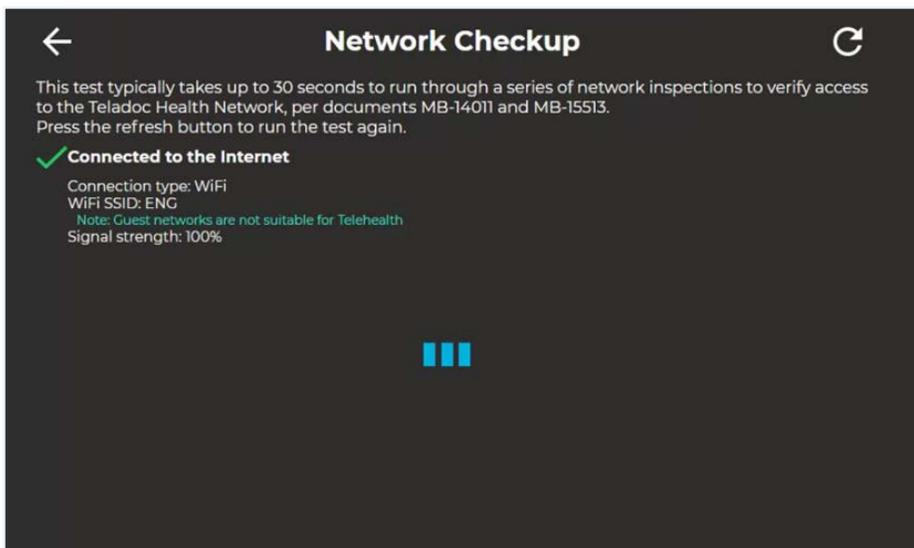




Device Network Checkup

The Network Checkup screen runs and displays the results of a test of the device's current network connection.

- The checkup will automatically run when the screen opens.
- A green check-mark appears for each past item.
- An orange X appears for any failed item with contact information on how to resolve any issues.



Device Settings Bluetooth Setup



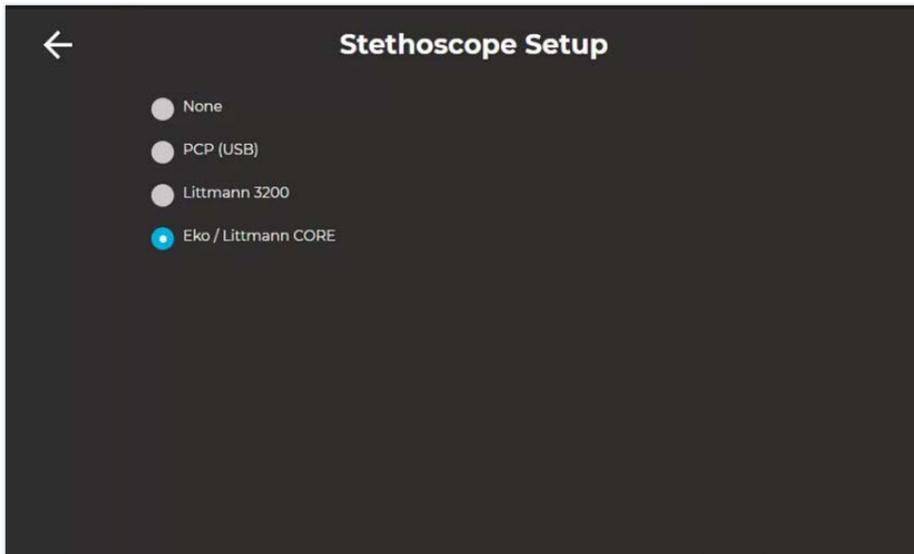
Use to connect or disconnect Bluetooth devices to the Lite 4 with Boom Camera.



Stethoscope Setup

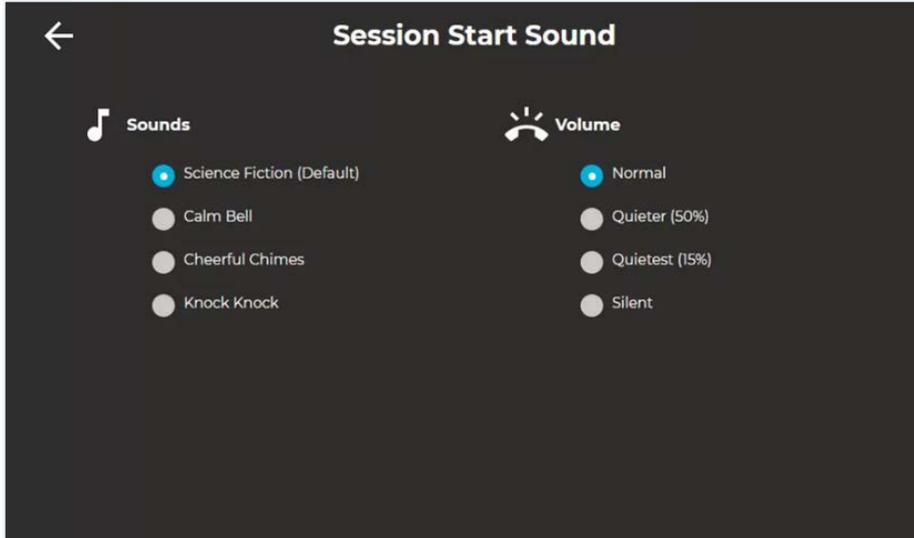
The **Stethoscope Setup** settings screen allows the user to select the optional third-party stethoscope during a virtual encounter.

See "[PCP-USB Stethoscope](#)" on [page 1](#) for more details.



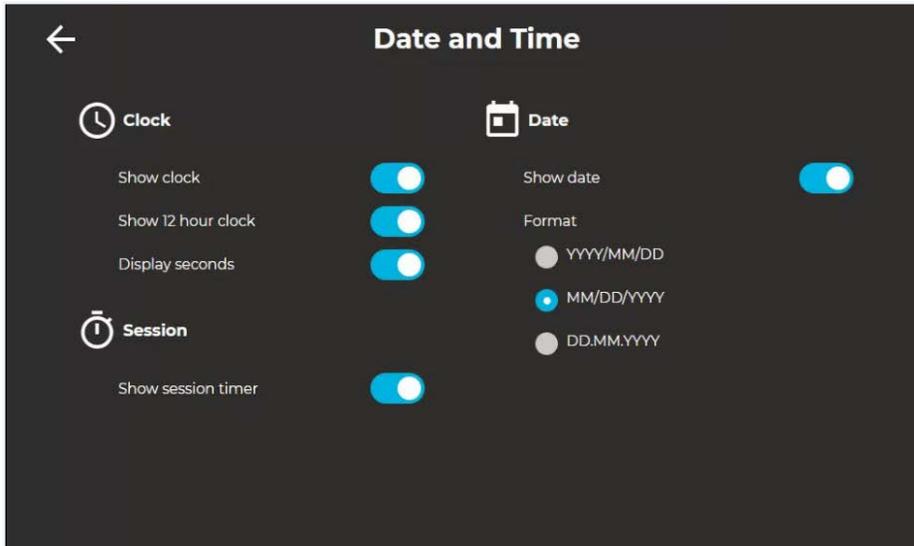
Device Session Start Sound

The Session Start Sound settings screen allows the user to change start sound volume on the device at the start of a virtual encounter.



Date and Time Settings Screen

The Date and Time settings screen allows the user to change how and if time is displayed on the device.

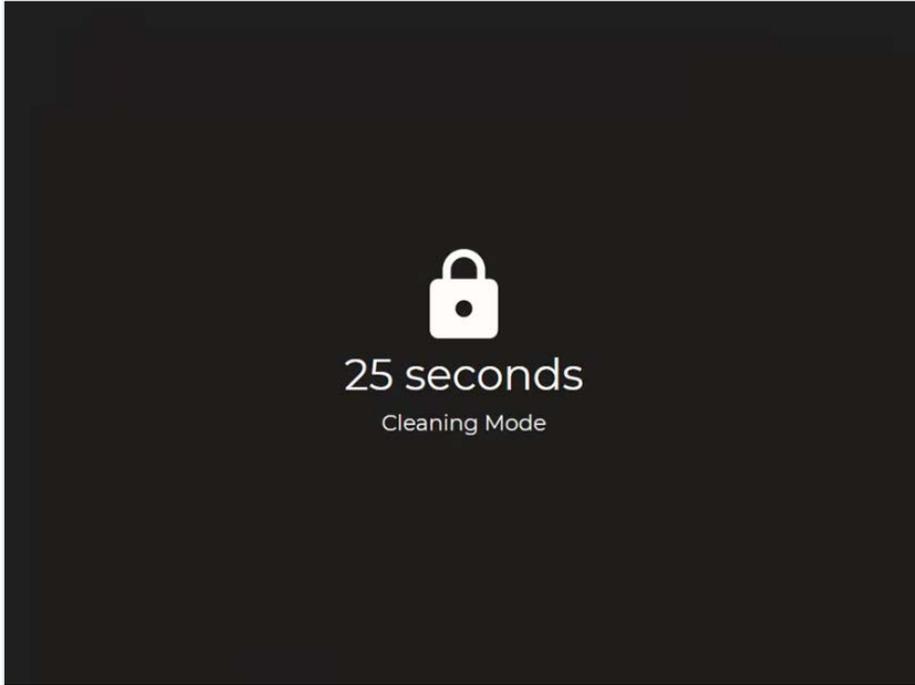


Device Cleaning Mode

The Lite 4 with Boom Camera has a screen-cleaning mode, so that no functionality is inadvertently called upon when cleaning.

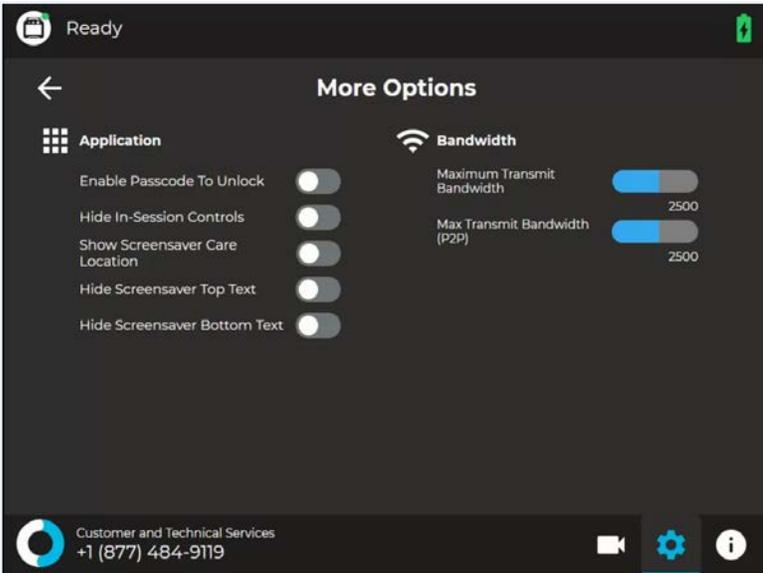
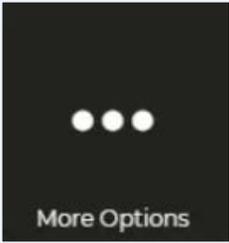
- See "[Cleaning and Maintenance](#)" on page 51 for more details.

Tap Settings  > Cleaning Mode , to disable the screen for 30-seconds to allow cleaning.



Device Settings - More Options

From the Settings screen, select the icon to display additional device settings.



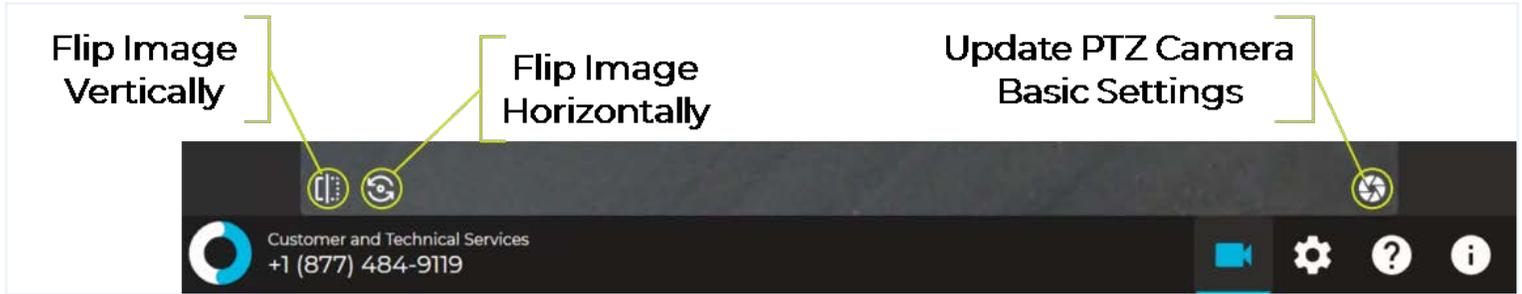
Application	
Hide In-Session Controls	<p>Hides the In-Session controls on the bottom of the screen.</p> <ul style="list-style-type: none"> While in-session, use the icon to  un-hide the In-Session Controls. See "Active Session Screen Navigation" on page 38 for more details.
Show Screensaver Care Location	Shows the device's location in the upper-left corner of the screensaver screen.
Enable Passcode To Unlock	Enables a passcode to unlock the device. The Passcode is the Device's Serial Number. You will be prompted to confirm activation of the Passcode.
Hide Screensaver Top Text	When toggled on, the text, Please keep this device on at all times is not displayed on the screensaver.
Hide Screensaver Bottom Text	When toggled on, the text, Touch to interact is not displayed on the screensaver.
Configuration	
Start Sessions in Privacy Mode	<p>When enabled, when a session starts, the device's camera will be disabled until the physician is told to activate the camera.</p> <ul style="list-style-type: none"> See "Privacy Mode" on page 1 for more details.

Bandwidth	
Maximum Transmit Bandwidth	Displays the current maximum transmit bandwidth setting
Max Transmit Bandwidth (P2P)	Displays the current maximum transmit bandwidth (P2P) setting

Lite 4 Boom Camera Basic Settings

Access the Lite 4 Boom Camera while the device is idle, out of session:

1. Select the  icon.
2. Select the Boom Camera, unless already selected.



Update PTZ Camera Basic Settings



Button	Function
Home	Point the PTZ camera to the preset Home location.
Set Home Position	Set the Home location for the PTZ camera.
Sleep	Point the PTZ camera to the preset Sleep location
Set Sleep Position	Set the Sleep location for the PTZ camera.

Reset	Reset the PTZ camera.
Reboot Camera	Reboot PTZ camera - cycles the PTZ camera's power.

Active Session Screen Navigation

When a Virtual Care session is in progress, a toolbar similar to the one below is displayed.



Icon	Function
	Volume control: Move slider to adjust device's volume. Mute the local volume by dragging the slider to the left or pressing the left-most speaker icon.
	Toggles the device's privacy handset on or off. While the handset is active, the device's speakers and microphone will be inactive.
	Mutes the device's microphone; tap again to unmute.
	Turns off the video.
	Toggles the Picture-in-Picture.
	Ends the current remote session. A confirmation box will display before the remote session is ended.
	Battery charge status is located in the upper right hand corner of the display on the Diagnostic Information screen. A lightning bolt indicates the battery is charging.
	Toggles the tool bar between show and hide.

Device Audio and Video Mute

The video can be paused by either the remote specialist or on the patient-side device.

Practitioner Mute Icons



Device Mute Icons



Privacy Handset

NOTE: Always place the Privacy Handset on the hook after use.

The Privacy Handset is for use in conversations that require privacy or understandability in a loud environment.

When the Privacy Handset is enabled from the Provider Access Software, the standard Patient Access Device audio system is disabled. This means the Patient Access Device microphone is not active, and the Patient Access Device speaker is not active.

When the Privacy Handset is disabled, the audio system is transferred from the phone, back to the standard Patient Access Device audio system.

It is important to return the Privacy Handset to the hook on the Patient Access Device. Ask someone on the Patient Access Device-side to return the Privacy Handset to the hook if necessary.

Activating the Privacy Handset from the Lite 4 with Boom Camera

Select the  icon from the device's screen to activate the Privacy Handset.



- The icon changes to .
- Activating the Privacy Handset deactivates the Lite 4 with Boom Camera's main speakers and microphone.

NOTE: The provider has the ability to deactivate the Privacy Handset and reactivate the Lite 4 with Boom Camera's main speakers and microphone.

Deactivating the Privacy Handset from the Lite 4 with Boom Camera

Select the  icon from the device's screen to activate the Privacy Handset.

- The icon changes to .
- The Lite 4 with Boom Camera's main speakers and microphone will again be active..

NOTE: The provider also has the ability to activate the Privacy Handset from their Provider Access Software.

Expansion Panel

The Lite 4 with Boom Camera's expansion panel includes:

- 1 - HDMI output port*
- 1 - HDMI input (optional)
- 2 - USB 3.0 ports
- 1 - Ethernet port

* HDMI output port can be used to mirror (duplicate) the Lite 4 with Boom Camera's main display on an external monitor or display.



NOTE: If you wish to view streaming video from external inputs in 720p HD quality, please ask Technical Support to configure the bandwidth settings on your account.

WARNINGS:

- The video images transmitted to and displayed on the Patient Access Device and Provider Access Software may not contain all of the information in the original scene. Video information from the camera is captured, compressed, transmitted, and redisplayed remotely at a different resolution. As a result, information in the original scene may be lost.
- Color reproduction in the transmitted video is not guaranteed. Color reproduction in a video system is a complicated combination of lighting, cameras, and display technology. It should not be assumed that the colors on the display are an exact replication of the actual colors in the scene.
- Clinical judgment and experience are required to review and interpret images and information transmitted via the Lite and Provider Access Software.

CAUTION:

- **Adding third party software or hardware to the Lite 4 with Boom Camera may cause it to malfunction or operate erratically; excluding those devices designed for connection through existing hardware ports. Teladoc Health does not support the addition of third party software or hardware to the Lite 4 with Boom Camera. Please check with Technical Service PRIOR to installing any third party devices.**
- **Do not leave video equipment connected to the Auxiliary Video Input. The equipment or the Patient Access Device may be damaged if the Patient Access Device is moved with equipment connected to the Input.**

Lite 4 Power On

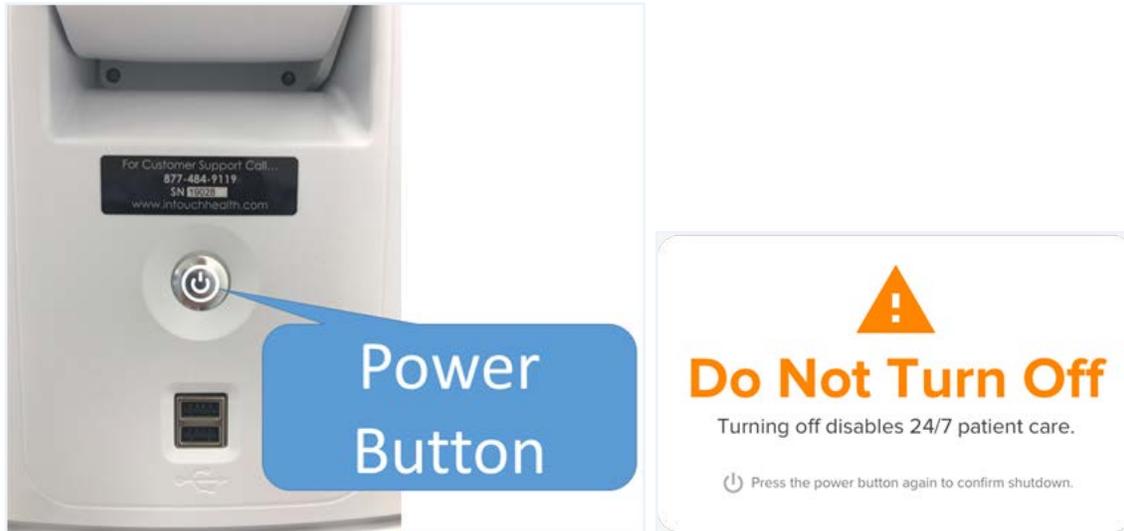
1. Locate the rocker battery switch on the front-bottom of the device.
2. Flip the rocker battery switch to the right.
 - Pressing the rocker battery switch to the left will disconnect the batteries, and pressing to the right will connect the batteries
3. Plug the Patient Access Device into a standard grounded AC outlet and allow the system to charge for at least 6 hours to reach a full charge.
4. Power on the Teladoc Health Lite 4 by pressing the power button located on the back of the head.



Lite 4 Power Off

Follow these steps to power off an Lite 4 with Boom Camera:

1. Press power button on back of the head.



2. Confirm the power off with Teladoc Health Patient Access Software by pressing power button a second time.
3. Unplug from wall.
4. Flip the battery switch to the off position (press left side of switch down).



Request a Service from an Teladoc Health Device

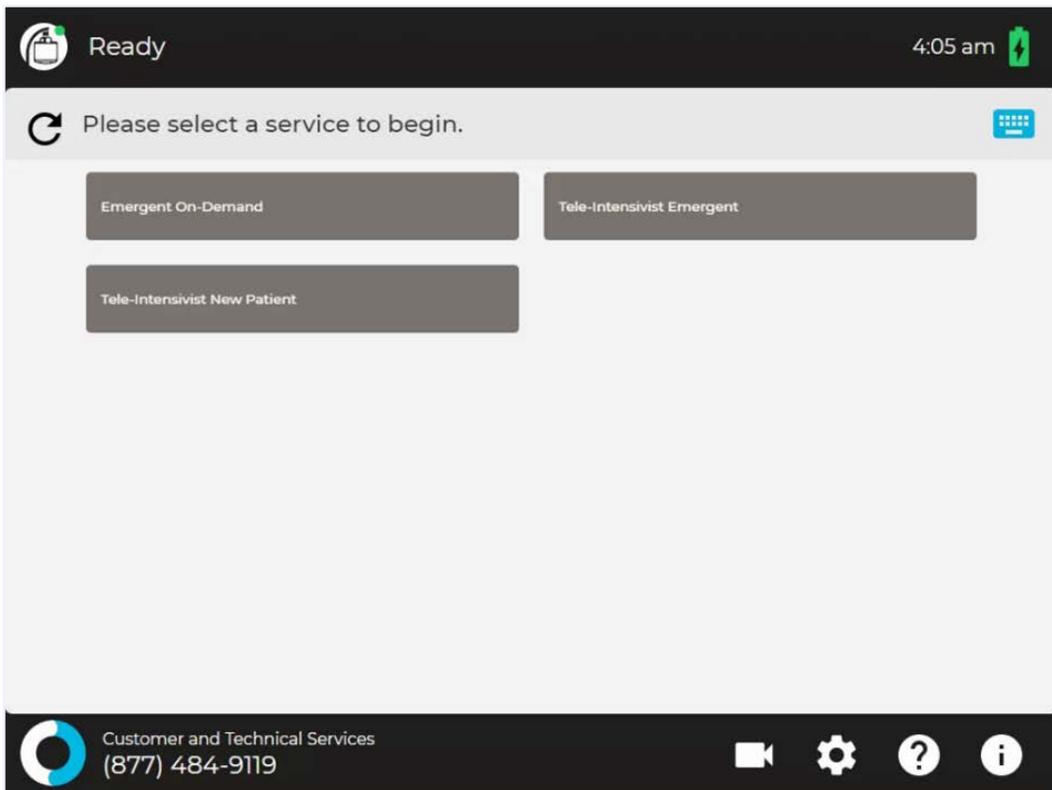
Some Lite 4 with Boom Camera devices are equipped to allow the user to request a consultation with a medical specialist.

Requesting a Consult from a Lite 4 with Boom Camera

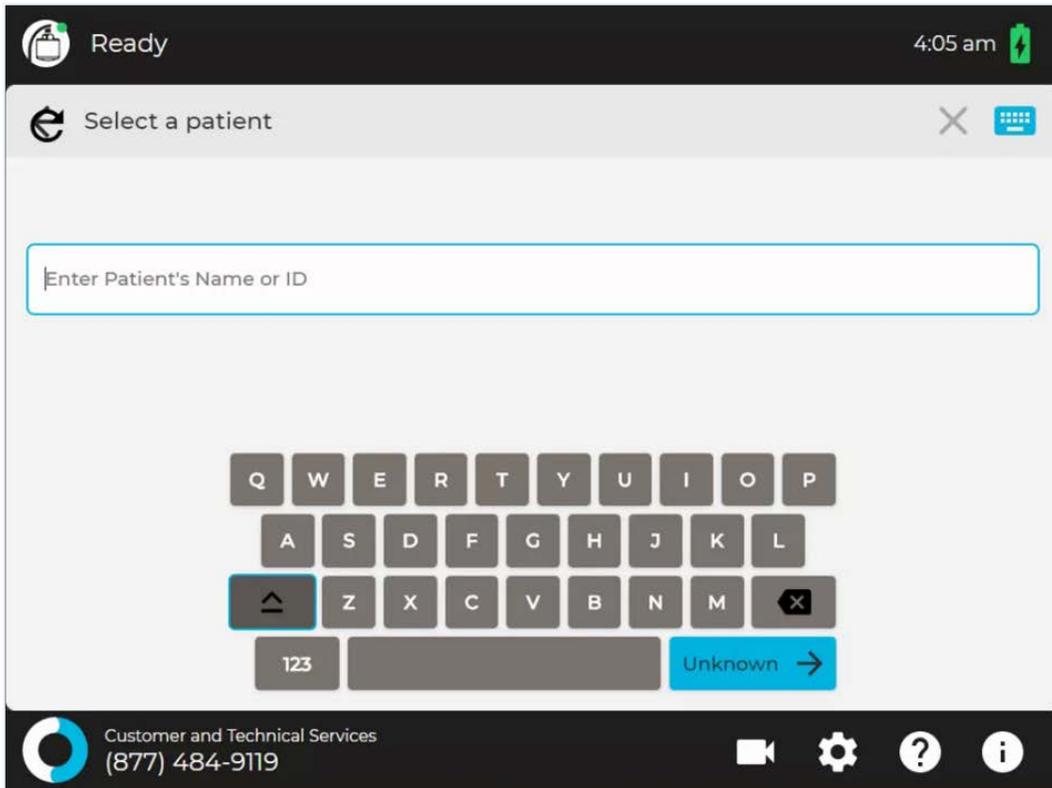
1. Tap anywhere on the screen to access the available services and providers.



- A screen displays with the available specialties.



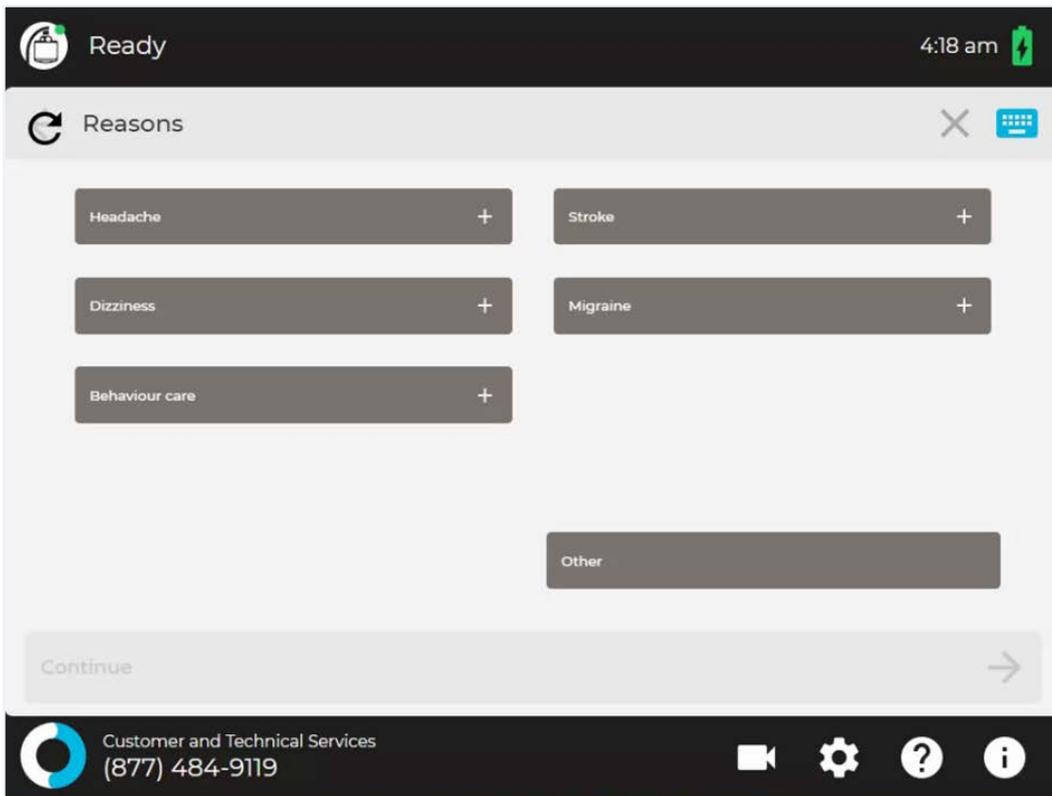
2. **Select the specialty from the available list.**
 - **A status screen displays**
3. **Enter the patient's name or ID.**



4. Select Continue.



5. Select one or more reasons.



The screen will change when the specialist connects to the device.

Patient Access Device - Error Messages

These text messages may appear in the lower right of the Lite 4 with Boom Camera's Display.

Message	Explanation	Action
"Internet connection failure." "Internet connection slow."	Very high round-trip latency at Provider Access or Patient Access Device. Possible cause: poor internal network conditions, low Quality of Service Internet connection or excessive bandwidth usage.	These error messages represent non-optimal Internet connection conditions. They may happen periodically on many networks under normal conditions. However, if they persist, contact the hospital's IT department.
"Internet failure: Severe loss."	Packets lost. May see jumpy video with lower frame rates at Provider Access or Patient Access Device. Possible cause: poor internal network conditions, low Quality of Service Internet connection or excessive bandwidth usage.	
"Internet failure: Severe loss remotely."	Problem was detected on reverse side (i.e., at the Provider Access). These messages are shown if problem is only being detected in one direction.	
"Internet failure: Audio lost."	Packets containing audio data lost, therefore user may notice loss of audio at Provider Access or Patient Access Device. Possible cause: poor internal network conditions or low Quality of Service Internet connection or excessive bandwidth usage.	
"Internet failure: Audio lost remotely."	Problem was detected on reverse side (i.e., at the Provider Access). These messages are shown if problem is only being detected in one direction.	
"No stethoscope audio. Power cycle it next to the device."	Physician cannot auscultate because the stethoscope audio is no longer connected to the Provider Access Software.	Restart stethoscope and try again.
"Stethoscope disabled due to critically low battery (10%). Please replace battery for normal operation."	Battery needs to be charged or replaced by the nurse on the Patient Access side.	Charge or replace battery.
"Stethoscope battery is critically low (10%). Sound degradation expected. Please replace battery soon."	Battery is critically low. Consider charging or replacing the battery soon.	Charge or replace battery.

Cleaning and Maintenance

Device Cleaning

Approved Cleaners

The following disinfectants have been tested for compatibility with Teladoc Health devices:

- PDI Bleach Wipes
- OxyCide
- Ethyl Alcohol
- Isopropyl Alcohol
- Sodium Hypochlorite
(5.25%-6.15% household bleach diluted 1:500 provides >100 ppm available chlorine)
- Iodophor Germicidal Detergent Solution
(follow product label for use dilution)
- Quaternary Ammonium Germicidal Detergent Solution
(follow product label for use dilution)

WARNINGS:

- Do not attempt to open or remove any parts of the Lite.
- Do not remove any covers to reduce the risk of electric shock. There are no user-serviceable components inside.
- Wear safety glasses when handling solution prior to dilution.
- Wear rubber or nitrile gloves if in contact with liquid.
- Avoid contact with eyes, skin and clothing.
- Wash hands after cleaning device.
- Do not wear product-contaminated clothing for prolonged periods.
- Always follow manufacturer's instructions on product labels when mixing chemicals.
- Ensure a power cord is connected to the AC wall outlet with protective earthing connection.

CAUTIONS:

- **DO NOT USE phenolic germicidal detergent solutions on any parts of the device. Contact Teladoc Health Technical Support for approved cleaning solutions.**
- **Severe contamination may require some disassembly, and this should only be done by a Teladoc Health representative.**
- **DO NOT IMMERSE the device.**
- **DO NOT ALLOW any cleaning solution inside the device.**
- **Keep the device from moisture and extreme temperatures.**
- **Avoid excess solution that could enter the device through its openings.**

NOTE: Refer to the TV manufacturer for details about cleaning the TV attached to the Lite 4 with Boom Camera.

Pre-cleaning

1. **Contact Teladoc Health Technical Support (TAC) at TAC@teladochealth.com or +1 (877) 484-9119 before powering down the device so they can pause monitoring the device.**
2. **Wear gloves.**
3. **Power off the Lite 4 with Boom Camera.**

Cleaning Instructions

Clean the outer surfaces of the device when visibly soiled or after contact with any contaminates. All surfaces, such as display monitors or sensor windows, may be disinfected using the following procedure. Use a commercial LCD screen cleaner to prevent craze, staining or discoloration of the display monitors and use optical lens cleaners to clean the camera lenses.

NOTE: For devices with touch screens, go to Settings > Cleaning Mode, to temporarily disable the touch interface for 30-seconds to enable cleaning. See ["Device Cleaning Mode" on page 34](#)

1. **Power down and unplug the device.**
2. **Soak a lint-free cloth in a hospital-grade disinfectant solution of sodium hypochlorite 6.15%, e.g., dilution 1:500 (1/4 oz. per gallon water) and wring out the cloth so that drips do not appear when wiping surfaces.**
3. **Wipe surfaces that have become soiled or contaminated. Avoid applying excess solution, which may enter the device through its openings.**
4. **Allow to air dry.**

Post-cleaning

- 1. Power on the Lite 4 with Boom Camera.**
- 2. Contact Technical Support (TAC) to let them know cleaning is complete so they can resume monitoring the device.**

Maintenance and Inspection

Lite 4 with Boom Camera Maintenance

The Lite 4 with Boom Camera contains no user serviceable parts and requires no maintenance. For further information regarding preventive maintenance, maintenance or assistance with troubleshooting, customers should contact Teladoc Health Technical Support at +1 (877) 484-9119.

Lite and Network Installation

Unpacking and Charging the Lite 4 with Boom Camera

WARNING: Plug the Lite 4 with Boom Camera into a grounded “Hospital Grade” electrical outlet to minimize the risk of electrical shock.

1. Carefully remove the Lite 4 with Boom Camera from its packaging, take care not to cause damage.
2. Flip the battery switch to the right.
 - Pressing the button to the left will disconnect the batteries and pressing to the right will connect the batteries.



3. Plug the Lite 4 with Boom Camera into grounded "Hospital Grade" AC outlet and allow the system to charge for at least 6 hours to reach a full charge.

Network Configuration

NOTE: For the best performance from the device in terms of Device Optimization and connection success, utilize the information found in these two documents:

- MB-15513 - Network Configuration for Teladoc Health Devices
- MB-14011 - Teladoc Health Telehealth Network Specifications

Contact your Teladoc Health representative for copies of these documents.

The Teladoc Health System is comprised of a Remote Presence Patient Access Device and a minimum of one Provider Access Software Device. The Provider Access and Patient Access Devices are linked via the Internet over a secure connection.

Configuring the Lite 4 with Boom Camera Wireless Connection

The Lite Control Core uses a Windows computing environment and a wireless network card.

For the Lite 4 with Boom Camera, basic Wireless Network connections can be made using the touch-screen, under Settings.

Non-Overlapping Channels

In order to achieve a smooth transition from one wireless access point (WAP) to the next it's important to configure each WAP on a non-overlapping channel.

Transmitting Power

The WAPs may be configured to provide the wireless signal at different power transmission levels. Setting the WAP to the maximum power transmission will deliver the maximum coverage area.

Interference

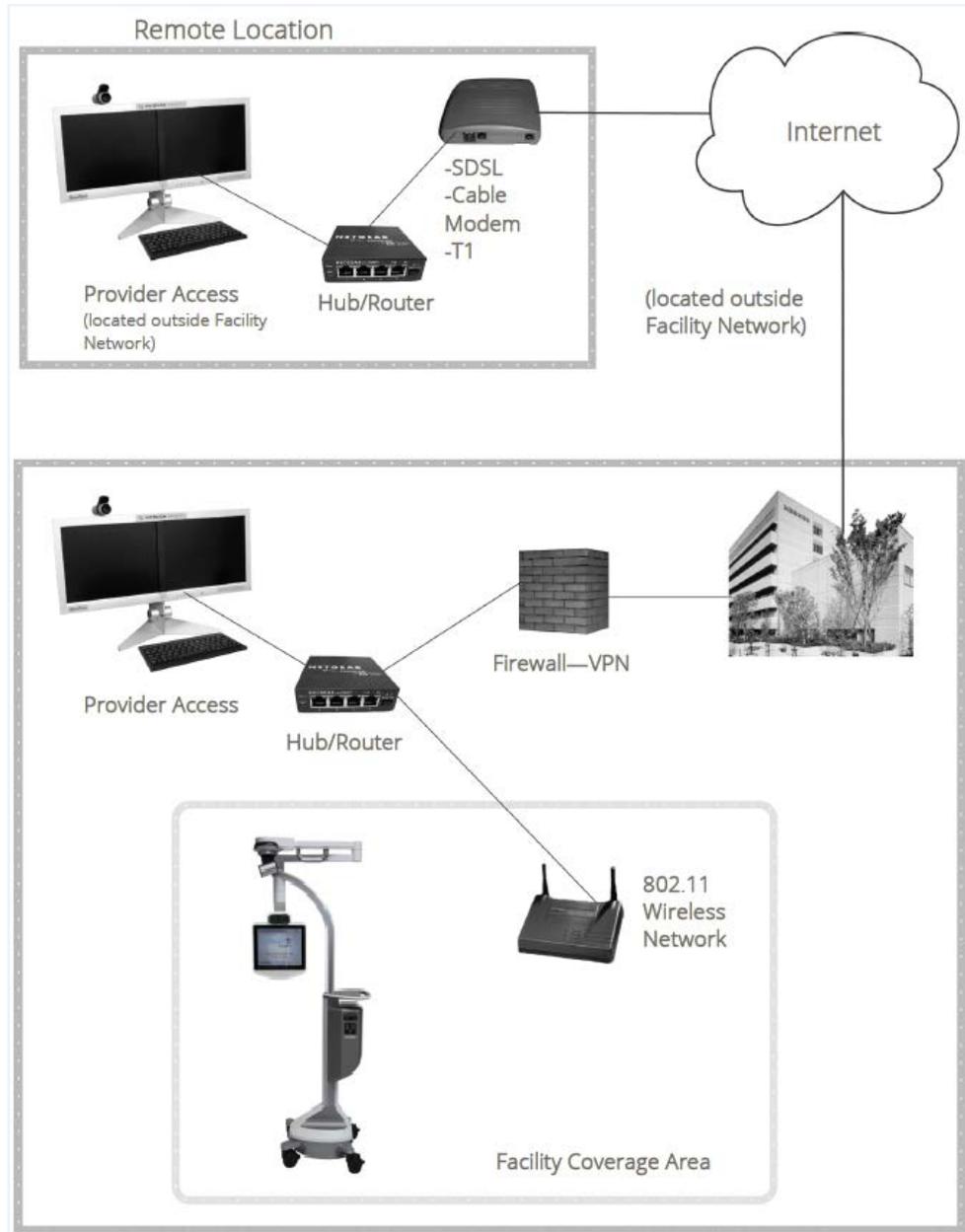
If WAPs are co-located in the same environment, radio frequency interference may be generated. Too many WAPs transmitting on overlapping channels may also degrade the wireless signal quality.

WAPs placed too close to one another may also produce RF congestion. In this case, the WAP transmission power should be reduced; therefore, reducing the coverage area and limiting the overlap between adjacent WAPs.

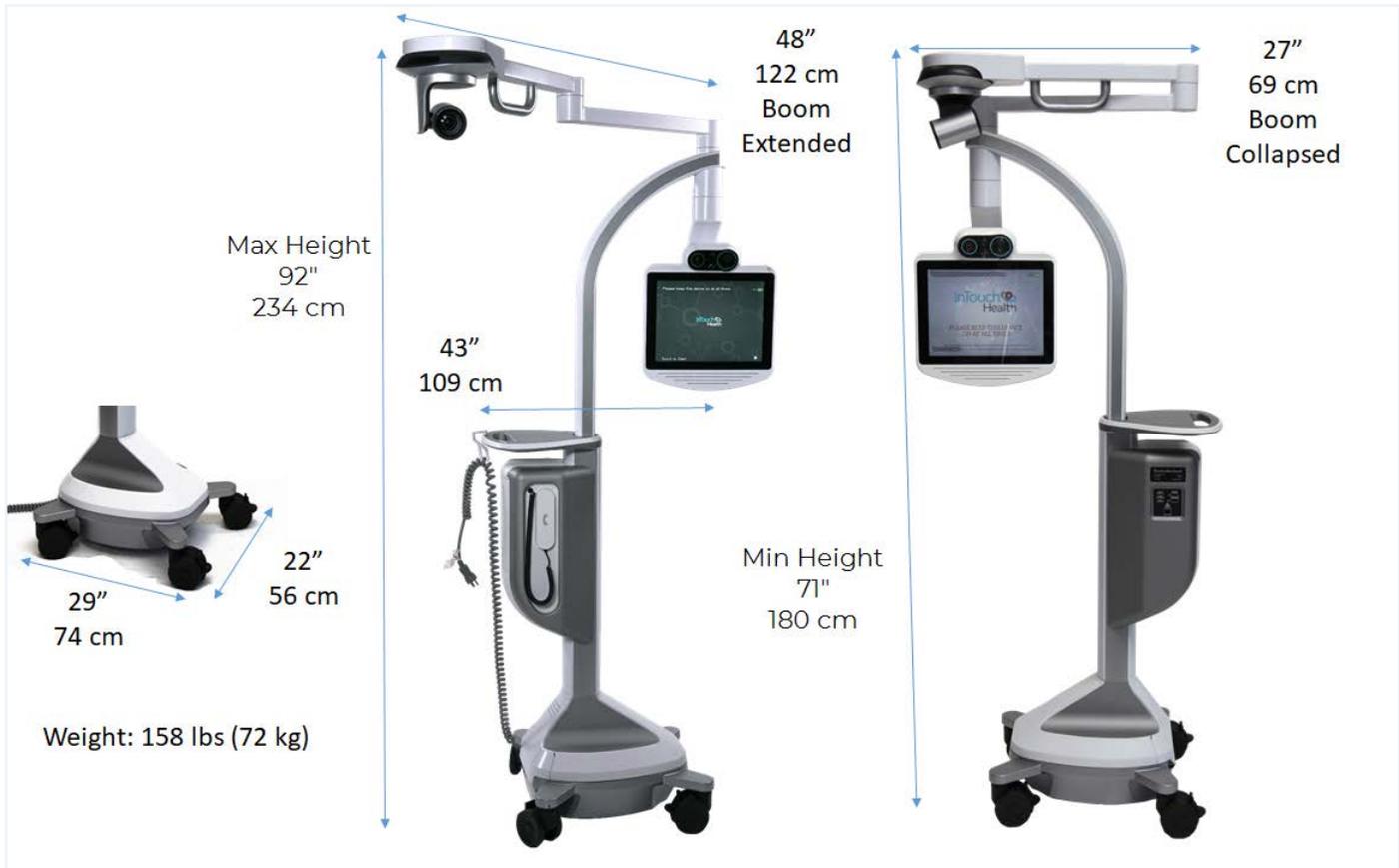
Security Options

Each wireless network must be configured with security to prevent unauthorized access to the network. The ADU provides multiple features to configure the Lite to access as well as secure the wireless network. Domain membership is not supported, but all other current security configurations can be configured. WPA2/AES-PSK is preferred.

Network Installation



Lite 4 with Boom Camera Technical Specifications



Performance

Head	Pan range: +/- 170°	Tilt range: +27° / -65° max
Boom Camera	Resolution: 1920x1080p 30fps 36x zoom (12x optical zoom + 3x digital zoom)	Range of Motion: Pan Rotation Angle: -170° ~ +170° Tilt Rotation Angle: -90° ~ +30°
Audio	Microphone: directional (hyper-cardioid), 10Hz-40kHz Speakers: 4X 5W mono	16 kHz sampling rate, 16-bit audio
Video	High Definition (HD) Cameras: 45X equivalent zoom, 30 fps, 1920 x 1080p resolution, 24-bit color	Display: 15" LCD, 1024x768 px, 500 nit, projected-capacitive touch-screen
Network	802.11 ac/a/b/g/n Bluetooth 4.1 + HS Gigabit Ethernet	
Battery Life	4 hrs (depending on use)	

Charging Time	4 hrs from 100% discharge to 80% charge (6 hrs to 100% charge)
---------------	----------------------------------------------------------------

System Input Power

	US and International
Voltage	100-240 VAC
Frequency	50/60 Hz
Current	6.5 Amps

Lite 4 with Boom Camera Classification

Lite 4 with Boom Camera - Class I, Type B, Continuous Operation

Medical Electrical Equipment Test Standards

- IEC 60601-1-2:2014 Ed.4 Medical Electrical Equipment - Part 1-2: General Requirements for Safety - Collateral Standard: Electromagnetic Compatibility - Requirements and Tests
- IEC 60601-1-6 Ed: 3.1 Medical Electrical Equipment - Part 1-6: General Requirements for Basic Safety and Essential Performance - Collateral Standard: Usability
- IEC 60601-1:1988 Ed.2 +A1;A2;C1 Medical Electrical Equipment - Part 1: General Requirements For Basic Safety And Essential Performance
- AAMI ES 60601-1:2005+A1 Medical Electrical Equipment - Part 1: General Requirements For Basic Safety And Essential Performance
- CSA C22.2#60601-1:2014 Ed.3 Medical Electrical Equipment - Part 1: General Requirements For Basic Safety And Essential Performance
- IEC 60601-1:2005 Ed.3 +A1;C1:2014 - Medical Electrical Equipment - Part 1: General Requirements For Basic Safety & Essential Performance
- IEC 60601-1-2 ed.2.1 (2005) Medical electrical equipment - Part 1-2: General requirements for safety - Collateral standard: Electromagnetic compatibility - Requirements and tests
- IEC 60601-1-6:2010 Ed.3 - Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
- IEC 60601-1:2005, COR1:2006, COR2:2007, AMD1:2012 Medical electrical equipment Part 1: General requirements for basic safety and essential performance
- IEC 60601-1:2012 (Edition 3.1) Medical electrical equipment Part 1-6 General requirements for safety - Collateral Standard: Usability
- IEC 60601-1-2 ed 4.0 (2014-02) Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests

- **IEC 60601-1-2 Ed. 2.0 Medical electrical equipment - Part 1-2: General requirements for safety - Collateral standard: Electromagnetic compatibility - Requirements and tests**
- **IEC 62366-1:2015 Ed.1 Medical Devices - Part 1: Application Of Usability Engineering To Medical Devices**
- **AAMI 62366-1: 2015 - Medical devices - Part 1: Application of usability engineering to medical devices**
- **CAN/CSA/IEC 62366-1: 2015 - Medical devices - Part 1: Application of usability engineering to medical devices**
- **CENELEC EN 62366-1: 2015 - Medical devices - Part 1: Application of usability engineering to medical devices**
- **EN 55035:2017 Electromagnetic Compatibility Of Multimedia Equipment - Immunity Requirements**
- **CENELEC EN 55032:2012 Electromagnetic Compatibility of Multimedia Equipment , - Emission Requirements**
- **IEC 60601-1:2005Ed.3+A1 Medical Electrical Equipment - Part 1: General Requirements For Basic Safety & Essential Performance**

Lite 4 with Boom Camera Environmental Specifications

Operating:

Designed to operate in an indoor environment suitable for human personnel. (10° to 35° C, 30 to 75% RH, 700 hPa to 1,065 hPa)

Non-operating:

Designed to travel to installations in commercial and cargo airliners and standard ground transportation. (0° to +50° C, 10 to 95% RH, 700 hPa to 1,065 hPa)

Contact Information

24/7 Live Technical Support

[1-800-484-9119](tel:1-800-484-9119)

24/7 Live Remote Technical Support & Live Chat

<https://intouchhealth.com/contact-us/>

Email Support

ITHSupport@intouchhealth.com

Website

www.InTouchHealth.com

Teladoc Health User Manuals

<https://manuals.intouchcustomer.com>

Sales & Product Demos

1-805-562-8686



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About Teladoc Health

Teladoc Health is the global virtual care leader, helping millions of people resolve their healthcare needs with confidence. Together with our clients and partners, we are continually modernizing the healthcare experience and making high-quality healthcare a reality for more people and organizations around the world.

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