on sight

USER MANUAL:

Onsight 2500 Rugged Smart Camera Version 7.0

Librestream

Librestream Onsight 2500

User Manual
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Name of Librestream Software:
Onsight 2500

Copyright Notice:

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1 Getting Started

1.1 The Onsight System

The Onsight system reaches beyond traditional video conferencing rooms to connect field workers in challenging environments with remote subject matter experts. Using Onsight Connect, subject matter experts can see live video and images and share feedback with field staff, external suppliers, or customers to assess operations or resolve issues immediately.

The Onsight Connect solution is comprised of three main components:

1. Onsight Connect service platform including rich collaboration software for the iPhone, iPad, Windows PC and Onsight Rugged Smart Cameras.
2. Onsight Rugged Smart Cameras include rugged and hazardous location certified models
3. Central system management tools including Onsight Account Manager and Onsight Management Suite

Together, these components provide a full operations-driven video collaboration solution that is optimized to perform in challenging field environments. Using Onsight, a field worker can securely collaborate with multiple offsite experts through live video, images, voice, and on-screen drawing ("telestration"). Experts and field workers can resolve issues, fix problems, diagnose, or monitor field situations on the shop floor, in a remote health clinic, or even at the scene of an emergency.

Onsight Connect can simultaneously connect to multiple Onsight Connect users and multiple Onsight 2500s.

1.2   Onsight Rugged Smart Cameras

Onsight Mobile Rugged Smart Cameras are used to communicate with Onsight Connect users (or multiple Onsight Connect users) over a network. The Onsight 2500 can fully collaborate from a remote site.

Technical experts and remote operators can jointly view, consult, diagnose and resolve issues by sending high-resolution video, sound and still images through streaming multimedia from the Onsight 2500 to one or more Onsight Connect endpoints.

Multiple Onsight Connect users and Onsight 2500s can participate in a conference call. The Onsight Connect PC user who establishes the connection with the Onsight 2500 is called the Conference Host.

The Onsight 2500 operator and Onsight Connect user can:

- Converse just as they would on a mobile telephone
- Stream audio and video recordings in real time
- View and listen to streaming audio/video output in real time
- Record and play back video
- Telestrate (draw) on the video image
- Capture and save snapshot images
- Share snapshot images
- Telestrate (draw) on the snapshot image
- Remotely adjust the controls on the Onsight 2500 (e.g., zoom, focus, lighting, etc.)

1.3   About this Manual

This manual describes how to use the Onsight 2500 on a system that has already been set up and configured. For information on the Onsight Connect for PC application, consult the Onsight Connect for PC User Manual.

1.3.1   Accessories and Support

For information on additional accessories or for updated Onsight documentation, consult the Librestream website at http://www.librestream.com/. For support information, including troubleshooting and release bulletins, consult the Librestream website at http://www.librestream.com/support.

1.4   Models

The Onsight system includes powerful and easy to use mobile devices that are specifically designed to operate within different environments. These environments range from light industrial usage in locations such as hospitals or repair depots to harsh outdoor environments including potentially hazardous locations. For a complete list of the Onsight mobile devices, please see http://www.librestream.com/products.html.

1.5   What's in the Box

The Onsight 2500:

- I/O Sled or External power adapter
- Rechargeable 2400 mAH Li-Ion battery pack
- Wrist strap
- Stylus screwdriver (2)
- I/O cover
- Lens cover
- Regulatory and Safety Guide

2   Onsight 2500 Basic Operation

> ⚠️ Before operating the Onsight 2500, you must read the Onsight Regulatory and Safety Guide.

Note that the Onsight 2500 shuts itself off when battery power is low.

- If the unit is on, and an operator is using it in an active call, a warning message appears so that the operator has time to plug the Onsight 2500 into the external power adapter, or end the call before the Onsight 2500 shuts off.
- If the unit is in Standby, it simply shuts itself off.
- If the unit is off, it cannot be started when the battery is low.

2.1   Charging the Battery

> ⚠️ Before charging the battery for the Onsight 2500Ex, you must read the Onsight 2500 Regulatory and Safety Guide.

New batteries must be charged prior to first use.

➔ To charge the battery:

1. Plug in the external power adaptor to the I/O sled and allow the battery to charge until the orange battery indicator extinguishes (up to eight hours).
2. The internal battery charger will shut itself off to prevent overcharging once the battery is fully charged.

➔ To check current battery levels:

1. Press the **Display** button 🔲 once and check the **Session Information Status** bar at the bottom of the Viewfinder which shows the battery level.
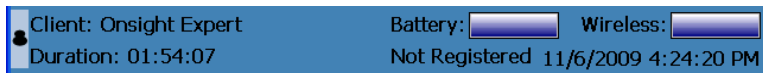
2. See paragraph 5.2.1, Session Information, on page 18 for more information on Viewfinder.

2.2   Inserting or Replacing the Battery

Before using this Onsight 2500 for the first time you must install and charge the battery.

2.2.1   Onsight 2500 Battery Replacement

> ⚠️ Before opening the Onsight 2500Ex battery cover, you must read the Onsight 2500 Regulatory and Safety Guide.

> 💡 Tip If an SD memory card needs to be inserted or replaced, it is best to do it at this time, prior to installing the battery. See section 2.3.

➔ To insert or replace the Onsight 2500 battery:

1. Ensure the Onsight 2500 is powered off before proceeding. See paragraph 2.4, Turning Power On or Off, on page 9 for instructions.
2. Open the battery compartment door using the stylus screwdriver.

Battery door thumb screw
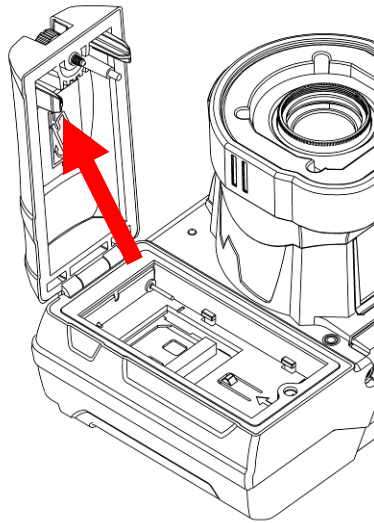
3. If the battery is being replaced, remove the old battery by sliding the battery back towards the end of the battery compartment and then lifting out the battery.

4. When installing the new battery, align the contact edge of the battery with the small recess lines in the battery compartment, keeping the opposite end of the battery up.

Alignment pins (2)

Recess lines (2)
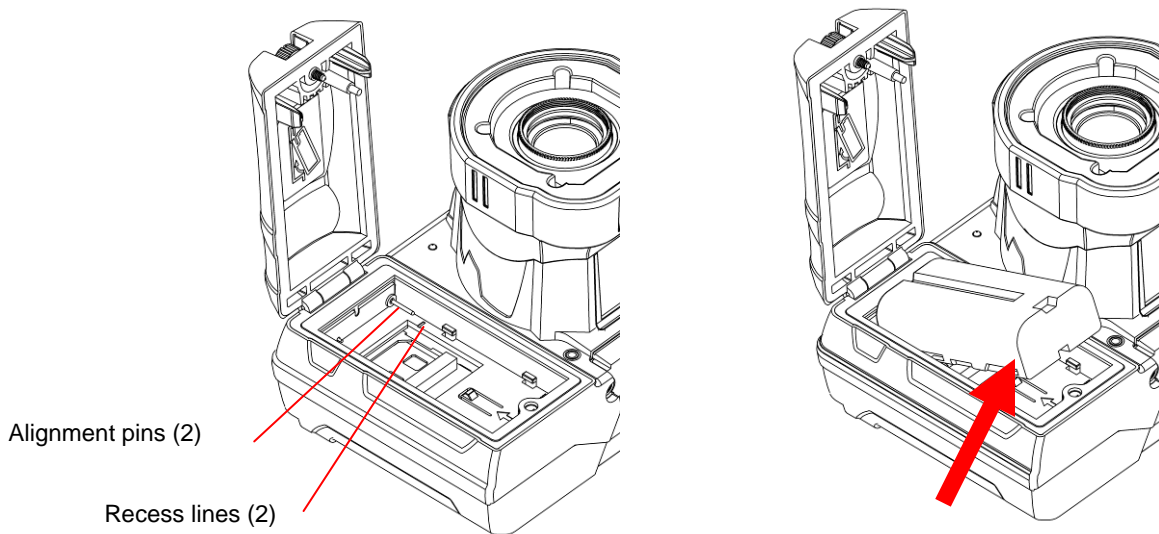
5. Slide the battery towards the compartment door and push downward to place in the battery well.

6. When the battery is sitting flat on the compartment floor, slide the battery towards the compartment door until seated.
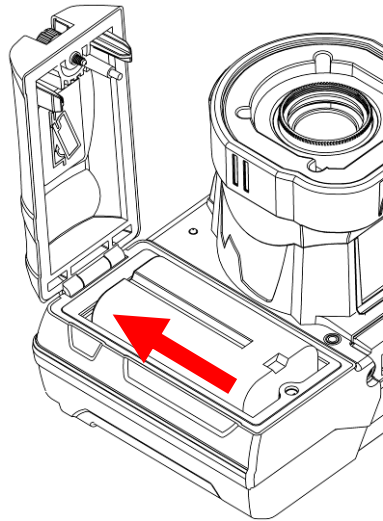
7. Close the battery compartment and tighten the screw. Note that the door will not close if the battery is not fully inserted, and the Onsight 2500 will not start if the door is not properly closed.

8. Attach the I/O Sled or Power Sled and use the external power adapter to charge the battery until the orange LED turns off (up to 8 hours).

> *The Onsight 2500 will not operate on the external adapter alone. You must have a battery installed.*

2.3   Inserting and Removing an SD Memory Card

The Onsight 2500 features an SD memory card slot to support recording, playback, image capture as well as configuration and system upgrades.

> ⚠ Before opening the Onsight 2500Ex battery cover, you must read the Onsight 2500 Regulatory and Safety Guide.

➔ To insert or replace the Onsight 2500 SD memory card:

1. Ensure the device is powered off before proceeding.

2. Open the battery compartment door using the stylus screwdriver, and remove the battery by sliding the battery back towards the end of the battery compartment and then lifting out the battery.
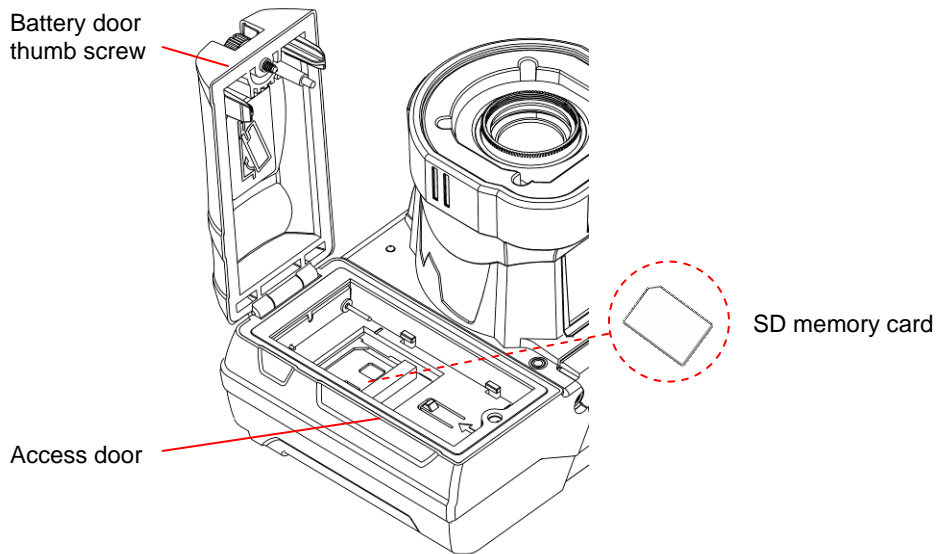
3. If there is already an SD memory card in place, flip open the access door to release the card from the slot.
4. Pull the card out.
5. Place the new card in the slot (at a slight angle to engage the contacts first) and then gently push the card down until it is seated.
6. Close the access door.
7. Re-insert the battery and close the compartment door.

2.4   Turning Power On or Off

There are three power modes: On, Off and Standby.

2.4.1   Power On Mode

➔ To turn the device on:

1. Press and release the **Power** button to turn the Onsight 2500 on.
2. When you first turn the camera on, you may be required to log in, and a touch panel calibration screen may appear.
3. When the power is on the **Power** indicator LED is green.

2.4.2   Power Off Mode

Turning off the Onsight 2500 automatically logs you out.

➔ To turn the device off:

1. Press and hold the **Power** button for two seconds.
    - If the device was on, a message is displayed indicating that the device is turning off.
    - If a call was active, a prompt appears asking for confirmation to terminate the call.
    - If the device was in Standby, it immediately switches off.
2. When the power is off the **Power** indicator LED is off.

3 First Time Use - Out of the Box

When using the 2500 for the first time ensure the battery has been charged and inserted in the device. If you need to save still images and recordings install an SD card prior to making any calls.

3.1.1 First Time Boot Up Sequence:

- Press the Power button to boot the 2500
- The Calibration screen will be displayed, follow the onscreen instructions
- The SETUP WIZARD is launched automatically, step through device setup and wireless network configuration. Once the 2500 has connected to the network the **network link indicator** will turn green. ⌖
- When the SETUP WIZARD has completed the USER AUTHENTICATION screen is displayed
- Login using your Onsight Connect User Account.
- Subsequent boot ups will take the user directly to the USER AUTHENTICATION screen.

3.1.2 Default Admin Account

Out of the Box the 2500 is configured with a default Administrator Account. *This account has full administration rights on the 2500*.

<div align="center">

username: admin

password: admin

</div>

> ⚠️ Security Advisory:
> Librestream **strongly recommends** that the Onsight Administrator change the default admin account's password from the default value. See Configuration-Maintenance-Password.

3.1.3 Touch Panel Calibration

The Viewfinder display on the back of the Onsight 2500 includes an integrated touch panel for use with the stylus. The touch panel allows control of many Onsight 2500 features, including menu selection, configuration, text entry (via on-screen keyboard) and on-screen button selection. In addition, the touch panel can be used to draw over images and video. See paragraph 6.7, Telestration (Drawing Lines on the Viewfinder), on page 25.

> ℹ️ *When you are using the Touch Panel, always use the stylus provided. Do not use other objects, as this could damage the Viewfinder display. Tap the screen lightly. Do not press hard or strike the screen.*

When you first start the Onsight 2500, if the touch panel has not been calibrated, a calibration screen is presented. Follow the on-screen instructions to calibrate your touch panel to permit accurate stylus tracking.

3.1.3.1 Show the Calibration Screen

If the touch screen needs to be calibrated you can access the calibration screen by simultaneously pressing the **Volume Up** and **Down** buttons on the keypad.

3.2   SETUP WIZARD

The first time the Onsight 2500 is powered up the SETUP WIZARD will automatically be displayed. Follow the onscreen instructions to configure the device and connect to a wireless network. The Date and Time must be accurately set in order to connect to the Onsight Connect Account Service. The 2500 must also be connected to a wireless network in order to access the Onsight Account Service and/or operate as a collaboration endpoint. You will need to have your network credentials ready for configuration.

3.3   USER AUTHENTICATION - LOGIN

There are two Onsight login options for the Onsight 2500. The options are based on the type of service you have purchased for use with the 2500: Onsight Connect User Accounts or On Premise licensing.

The two methods are:

- **Onsight Connect Account Service** – the Onsight 2500 connects to the Onsight Connect hosted cloud service with cloud based Onsight Connect User Accounts. This method provides additional features outlined in section 7. (Note: the default Admin account is still available when using this method.)

- **Local Service** – This is used with On Premise licensing, the Onsight 2500 user logins locally using either the default admin account or a locally imported user file.
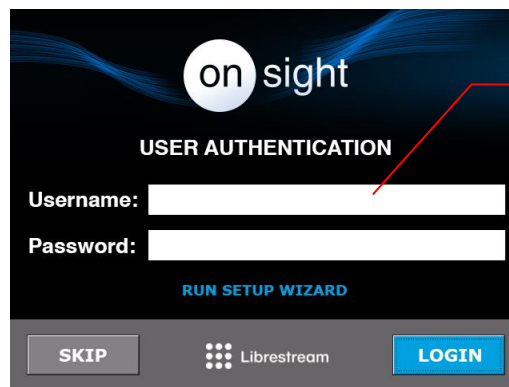
IMPORTANT: The Onsight 2500 ships with a Local Service license included i.e. you do not require internet access to login. The login information is provided below in section 2.6.2. If your organization is using the hosted Onsight Connect Account Service, you will likely use the same login method you are using for Onsight PC and Onsight iOS endpoints for a consistent experience.

3.3.1   User Authentication Controls

The Administrator can control which setup features are available on the User Authentication screen. By default the **Run Setup Wizard** and **SKIP** buttons are enabled. Both these features give standard users access to the 2500 device configuration options (but do not expose features requiring Admin rights). To disable these features an Administrator must go to Configuration-Security-Login and disable **Anonymous login permitted** and **Allow Setup Wizard link at login page**.

> ⚠️ Security Advisory:
> Librestream **strongly recommends** that the Onsight Administrator change the default admin account's password from the default value regardless of which login method is used.

3.3.2   Logging In using Onsight Connect Account Service

If your Onsight 2500 has been configured to request a login (i.e. auto login is disabled), you will be prompted with a **User Authentication** screen, as shown below. In the Username and Password fields enter the Onsight Account user name and password assigned to you by your Onsight Account administrator.

For an Onsight Account Service login you are assigned a Username and a temporary Password via a Welcome email sent to you by the Onsight Account Manager:

- **Username**: *assigned by Onsight Account Manager*
- **Password**: *assigned by Onsight Account Manager*

The first time you login you are prompted to change your password.

→ To login to the Onsight 2500 using Onsight Connect Account Service:

1. The Onsight 2500 must have an active network connection in order to contact the Onsight Connect Account Service. If your network connection has not been pre-configured, either tap **RUN SETUP WIZARD**, **SKIP** or contact your Onsight Administrator create a Wireless network connection.

> ℹ️ *The **RUN SETUP WIZARD** and **SKIP** links are enabled by default; if they are not available contact your Onsight Administrator for instructions on connecting to the wireless network.*

2. Once the **SETUP WIZARD** has completed press **TO LOGIN** to return to the **USER AUTHENTICATION** screen. The *network link indicator* must be green 品 to continue with the login.
3. Tap the **Username** field with the stylus and tap characters on the keyboard to enter your user name. (your Onsight administrator will provide this to you).
4. Tap the **Password** field with the stylus and tap characters on the keyboard to enter your password.
5. Tap the **LOGIN** button to finish logging in.

3.3.3   Logging in using Local Service Account

If your Onsight 2500 has been configured to request a login, you will be prompted with a **User Authentication** screen, as shown below. In the Username and Password fields enter the user name and password given to you by your Onsight system administrator.

For a Local Service log in, the default user name and password are:

- **Username**: *admin*
- **Password**: *admin*

This is a built-in user name that is meant to allow an Onsight administrator to initially log in and set up other user names and passwords. ***Librestream strongly recommends that the Onsight administrator change the Local Service admin password from the default to improve security.***

> ⚠️ Librestream ***strongly recommends*** that the Onsight Administrator change the Local Service **admin** password from the default to improve security.

➔ To login to the Onsight 2500 using the Local Service:

1. Tap the **Username** field with the stylus and tap characters on the keyboard to enter your user name. (your Onsight administrator will provide this to you).
2. Tap the **Password** field with the stylus and tap characters on the keyboard to enter your password.
3. Tap the **Login** button to finish logging in.

> ℹ️ *If your Onsight system administrator has enabled anonymous login, a **SKIP** button is available to bypass the login process. This is a Local Service login that allows wireless network configuration.*

3.3.4   Logging Out

➔ To log out:

1. From the standard Viewfinder display window, press and release the **Display** button 🔲 three times (or until the **Main Menu** appears).
2. Select **Sign Out** from the **Main Menu**.
3. If you are still in a call, a message will appear confirming that you need to hang up before you can sign out. Select **Hang Up** to end the call and sign out back to the **User Authentication login** screen.

4   Answering & Initiating Calls

The Onsight 2500 operator can either:

- Call an Onsight Connect user, or
- Answer an incoming call from an Onsight Connect user.

Use the **Send** ◐ and **End** ⊗ buttons on the Navigation pad to start and end calls, similar to the keys on a mobile phone. Once a call is established, you can collaborate using voice, video, audio, images and annotations.

4.1   Network Connection

Before you can answer or make a call, you must be able to communicate with the network, either through a direct wired connection, or wireless connection. The **Network** link indicator ⌘, the middle of the three indicators on the top of the Onsight 2500, indicates whether or not a **Network** link exists.

If a connection is required from a hotspot/guest network that requires browser access, go to the **Main Menu > Configuration > Network > Hotspot Login** screen. A successful login will result in the display of the Librestream welcome page. See paragraph 7.7, Configuration, on page 39.

➔ To check current wireless network conditions:

1. Press the **Display** button once ▣ and check the **Session** information at the bottom of the Viewfinder.
2. Another option is to press the **Display** button three times to display the **Main Menu**. Tap the **Status Menu** option with the stylus, and then select **Network Status**.

4.2   Add Contacts

Press the **Send** ◐ button to display the Contacts screen, select the **Global Directory** tab. Use the **Search** field to enter the name of the contact you would like to add to your contact list. Select the contact in the list and press the **Add to Contacts** button.

Note that Onsight Connect can initiate a conference call with other Onsight Connect users so that the Onsight 2500 can collaborate with multiple experts.

*In order to participate in a call, all participants must have the same encryption setting. The encryption setting of the person initiating the call must be used by all other call participants. The **Encryption Mode** is set in the **Main Menu > Configuration > Security > Encryption** screen. See paragraph 7.7, Configuration, on page 39.*

4.3   Answer a Call

To receive incoming calls, the Onsight 2500 must be **On** or in **Standby** mode. When a call comes in, the Onsight 2500 rings like a mobile phone and the Viewfinder displays an Incoming Call message.

➔ To accept (answer) the call:

1. Tap **Accept** or press the Onsight 2500 **Send** button ⬤.
2. If there is more than one participant (i.e. Onsight Connect), in the call then the message "**Other participants are in this call. See the call status panel for details.**" This means that there is more than one Onsight Connect connected to the call and you are in a conference call.
3. Tap the 🔳 icon to bring up th**e Call Status** screen.
4. Tap the **Call Status** screen to close it.

➔ To refuse the call:

1. Tap **Decline** or press the **End** button ⊗.

➔ To enable automatic answering of a call:

1. From **Main Menu > Configuration > Call Control > General**, select "**Enable auto answer**".
2. Any incoming call will now be answered automatically after three rings.

4.4   Make a Call

➔ To initiate or start a call from an Onsight 2500:

1. Press the **Send** button ⬤ to display a **Contacts** window listing the contacts (personal and global) that this Onsight 2500 has been set up to contact.

> ℹ️ Note: **Global Contacts** and **Invite Guest** are only present if you currently have an active connection to Onsight Account Service.

2. Use the Navigation pad buttons, or tap the name to highlight the contact that you want to call. When you select a name, the contact's destination address appears in the field at the bottom of the window.

    If the correct name does not exist, tap the field at the bottom of the window and use the on-screen keyboard to enter the address of the contact you need to call. Consult your Onsight system administrator for details.
3. When the desired network address is displayed in the **Network** address field either tap **Dial** with the stylus or press the **Send** button ⬤ to initiate the call.

You will hear the outgoing rings or a busy signal on the Onsight 2500 just as you would on a mobile phone. When the call is answered, you can start talking, just like a mobile phone. If the call is declined, a message will be displayed indicating the reason.

4.4.1   TOUCH TONE KEYPAD - Calling a Conference Bridge

When calling a conference bridge you may be prompted by the Bridge to enter a Conference ID. The **TOUCH TONE KEYPAD** provides DTMF tones allowing you to enter the code and join the conference bridge.

➔ To enter a Conference ID:

1. From the Contacts screen, press the **KeyPad** button to display the **TOUCH TONE KEYPAD**.

2. Enter the required code and press X to exit.

3. You will immediately join the Audio call, press the stream button to start sending the video stream. See section 4.5.

4.5   Turning the Video Stream On or Off

Starting the video stream sends video (including subject audio) from the Onsight 2500 to the Onsight Connect participants. The media stream will continue as long as the call is connected or until the operator or Onsight Connect selects an option to stop or temporarily freeze the streaming.

➔ To start and stop streaming live video to Onsight Connect:

1. Press the green **Stream** button on the top of the Onsight 2500.

> *When streaming video the green streaming icon is displayed* ⬤ *.*

2. Press the **Stream** button again to stop streaming.

> Tip   This does not disconnect the call; the stream can be started and stopped as often as desired within the current call.

➔ To temporarily freeze the streaming video, without exiting from the video stream:

1. Press the **Enter** button ⬤. This freezes the video image.

2. Press the **Enter** button again to restart live video.

3. The message "**Video resumed**" appears.

> *If the device is sharing an image when the stream is resumed, then the video stream resumes on the Onsight Connect Call window, but the captured image remains in the Onsight 2500's Viewfinder until image sharing is ended by either briefly pressing the **Capture** button, or selecting **End Still Image Sharing** from the **Image Shared** icon* ⬚ *.*

4.6   Ending a Call

➔ To end a call:

1.   Press the **End** button ⊗.

> ℹ️ *Onsight Connect can also terminate the call from the Onsight Connect application.*

4.7   Audio Communication

⚠️ Before using a headset with the Onsight 2500Ex, you must read the Onsight 2500 Regulatory and Safety Guide.

The Onsight 2500 can operate using its built-in microphone and speaker, or a headset:

   Speaker phone – if a headset is not attached, the Onsight 2500 operates as a speaker phone using its built-in omni-directional microphone and speaker.

   Headset – if you plug a headset into the headset connector the Onsight 2500 uses the headset microphone and speaker. This is useful in noisy environments or where privacy is a concern. In this case, Subject Audio continues to use the built-in microphone or external audio line-in, if selected. When using a closed-ear headset, the **Headset Sidetone** feature provides feedback to the user to ensure speaking volume is satisfactory. **Main Menu > Configuration > Audio > General** enables the sidetone feature, and **Main Menu > Configuration > Audio > Volumes** allows for sidetone volume adjustment.

> ℹ️ *Onsight 2500 – Audio Line-in is only available on the I/O Sled accessory. For more information on using the I/O Sled, see paragraph 9.2.2, I/O Sled, on page 49.*

> 💡 Tip If the operator needs to capture particular sounds as part of the video stream (e.g., an odd noise being made by a piece of machinery), you can also set a Subject Audio source, as described in paragraph 6.2, Setting the Subject Audio Source and Volumes, on page 20.

5   Viewfinder

The Viewfinder shows what the Onsight 2500's is viewing and also provides status information and access to menus. Depending on the display mode, the Viewfinder uses a status bar, icons, and popup windows to provide information, notifications, and prompts as necessary.

Note that the status bar information and menus only appear for the Onsight 2500 operator it is not sent as part of the video stream during active calls.

5.1   Default Viewfinder Mode

The default Viewfinder mode maximizes the visible video area by providing only essential status information on screen. The **Status** bar area is initially blank, but icons, pop-up notifications, and prompts appear as necessary.

5.2   Controlling the Viewfinder Mode

➔ To control the Viewfinder mode:

1.   Starting from the Default mode that appears when the device first turns on, press the **Display** button 🔲 one or more times to switch the Viewfinder into a different mode, as described below.

Display button	Result
Press and release once	Session information displayed.
Press and release second time	Stream information displayed.
Press and release third time	Main Menu displayed – for configuration and other setup options.
Press and release fourth time	Display returns to default Viewfinder mode.
Press and hold	Toggles the display backlight on or power save.

5.2.1   Session Information

➔ To view the **Session Information Status** bar:

1.   Starting from the default Viewfinder, press **Display** 🔲 once to display session information in the **Session Information Status** bar.
2.   The Viewfinder shows live camera video and status information.
3.   You can hide the **Session Information Status** bar by tapping on the **Pin** icon 📌 in the bottom left corner of the status bar.
4.   To bring back the **Session Information Status** bar, tap the bottom of the screen or press **Display**.
5.   If you want to keep the **Session Information Status** bar visible, tap the **Pin** icon 📌.

5.2.2   Streaming Status

➔ To view the **Stream Status** bar:

1.   Starting from the default Viewfinder, press **Display** 🔲 twice to display stream information in the **Stream Status** bar.
2.   The Viewfinder shows live camera video and status information.
3.   You can hide the **Stream Status** bar by tapping on the **Pin** icon 📌 in the bottom left corner of the status bar.

4. To bring back the **Stream Status** bar, tap the bottom of the screen or press **Display**.

5. If you want to keep the **Stream Status** bar visible, tap the **Pin** icon 📌.

5.2.3   Main Menu

➔ To access the **Main Menu**:

1. Starting from the default Viewfinder, press **Display** 🔲 three times.

2. The **Main Menu** appears with these selections.

3. To exit this menu, press and release the **Display** 🔲 button.

5.2.4   Viewfinder Backlight On or Power Save

➔ If you do not require the Viewfinder backlight:

1. Press and hold the **Display** button 🔲 to turn on Backlight Power Save, this will dim the backlight and enters power-saving mode. Placing the backlight in power save mode extends run time when operating on battery.

2. Press and hold the **Display** button again to turn off Backlight Power Save.

3. Press and hold the **Display** button again to turn on Backlight Power Boost, this will make the backlight brighter.

➔ The default backlight level and power save mode can also be set from the Onsight 2500 configuration screen:

1. Press the **Display** button 🔲 three times until the **Main Menu** appears.

2. Select **Configuration > Display > Backlight**.

3. Select ☑ to enable the **Backlight power save**.

4. If the **Backlight power save** is not enabled, use the slide bar to adjust the backlight level.

6   Video and Audio Control – Media Streams

Onsight can provide a complete record of a call, including two-way voice, video, subject audio, images and telestration. Calls can also be recorded without an active video stream.

Once a call is connected, the Onsight 2500 can begin streaming media to Onsight Connect call participants.

In a conference call the media stream is seen by *all* Onsight Connect participants. Onsight Connect conference calls support one active video stream with multiple Audio streams. All participants see the same video source while being able to talk with all participants simultaneously.

6.1   Turning the Video Stream On or Off

➔ To start and stop streaming live video to Onsight Connect:

5.   Press the **Stream** button on the top of the Onsight 2500.

> *When streaming video the green streaming icon is displayed ⬤ .*

6.   Press the **Stream** button again to stop streaming.

> (Tip) This does not disconnect the call; the stream can be started and stopped as often as desired within the current call.

➔ To temporarily freeze the streaming video, without exiting from the video stream:

7.   Press the **Enter** button⏎. This freezes the video image.

8.   Press the **Enter** button again to restart live video.

9.   The message "**Video resumed**" appears.

> *If the device is sharing an image when the stream is resumed, then the video stream resumes on the Onsight Connect Call window, but the captured image remains in the Onsight 2500's Viewfinder until image sharing is ended by either briefly pressing the **Capture** button, or selecting **End Still Image Sharing** from the **Image Shared** icon 🖼 .*

6.2   Setting the Subject Audio Source and Volumes

The Onsight 2500 provides two audio channels: Subject Audio and Voice (VoIP).

Subject Audio is the unprocessed sound coming from the subject. The sound (Subject Audio) being captured and streamed with the video is captured by the Onsight 2500's built-in microphone or from an external audio source connected to the Onsight 2500's Audio Line-in port. ***This allows the Onsight 2500 to capture and stream audio that is time-synchronized with the video***.

For the Onsight 2500, Audio Line-in is located on the I/O Sled accessory (see paragraph 9.2.2 on page 49).

> *For the Onsight 2500 Device, the Audio Line-in port can be configured to accept either an external microphone or line-level audio input.*

The **Stream** button also starts and stops streaming of Subject Audio, just as in video streaming described in paragraph 6.1.

For audio communication see paragraph 4.7, on page 17.

> *For the Onsight 2500 Devices, incoming Subject Audio can be muted on the Stream Status screen by checking 'Mute Subject Audio'.*

➔ To set which source will act as the Subject Audio source:

1. From the standard Viewfinder display window, press the **Display** button ▣ three times (or until the **Main Menu** appears).

2. Tap the **Configuration** option with the stylus to display the **Configuration** screen.

3. Select **Audio** and then select **Source**.

4. This screen allows selection of the **Subject Audio Source** and Microphone or Line-in level inputs. Select **Mic Level** (Onsight 2500 only) when using an external microphone. Use **Line Level** when using an external audio source and then adjust the gain for the best Subject Audio volume. Select **Internal Mic** for the internal microphone.

➔ To set audio volume levels:

1.   From the standard Viewfinder display window, press the **Display** button 🔲 three times (or until the **Main Menu** appears).

2.   Tap the **Configuration** option with the stylus to display the **Configuration** screen.

3.   Select **Audio** and then select **Volumes**.

4.   This screen allows you to control speaker volume and microphone mute, as well as ring volume and sidetone volume. Note that if the microphone mute (🔇) checkbox is selected then both voice and subject audio are muted.

6.3   Using S-Video

For the Onsight 2500, the S-Video connection can be configured as either an input (to accept video from another S-Video device) or an output (to provide video to another S-Video device).

*When using the S-Video input on the Onsight 2500 make sure to connect and power up the other video source before switching the Onsight 2500's **Video Source** setting to **S-Video In**.*

For the Onsight 2500, S-Video is only available on the I/O Sled accessory. For more information on using the I/O Sled, see paragraph 9.2.2 on page 49.

➜ To select the video source:

1. From the standard Viewfinder display window, press the **Display** button 🔲 three times (or until the **Main Menu** appears).
2. Tap the **Configuration** option with the stylus to display the **Configuration** screen.
3. Select **Video** and then select **Source**.
4. This screen allows you to select either **Internal Video** or **S-Video In**.

> ℹ️ *The S-Video type (NTSC or PAL) must be configured to correctly match the external S-Video device.*

6.4   Turning Illumination On or Off

The illumination ring on the Onsight 2500 can be used to provide extra lighting in dim lighting situations. There are two light settings that trigger a different set of lights on the illumination ring.

➜ To adjust illumination levels:

1. Use the **Illumination** button 🔆 located on the Navigation pad on the back of the Onsight 2500.
2. Toggle the light settings:
    *   Normal – optimized for distant objects(🔆)
    *   Macro – optimized for close-ups (🔆) (Onsight 2500 only)
    *   Off – turns the light off

Note that if the Onsight 2500 is displaying a configuration or directory screen, the **Illumination** button operates as a right arrow key. In this case, press and hold the **Function** button (Onsight 2500 only), then press the **Illumination** button to adjust the light setting.

> 💡 Tip   For the Onsight 2500, go to the **Main Menu > Status Menu > Camera Status** screen to adjust the level of illumination.

6.5   Adjusting Zoom Levels

1. Use the **Zoom** buttons ▄▄ located above the Navigation pad on the back of the Onsight 2500.

    *   To adjust the zoom one step at a time, press and release the **Minus** (–) button (zoom out) or the **Plus** (+) button (zoom in).
    *   To adjust zoom levels at a faster rate, press and hold the **Minus** (–) or **Plus** (+) button, and release it when the zoom level is where you need it.

    The minimum focusing distance changes with the zoom level. As you zoom in, the minimum focus distance moves out. For example, if you are close to an object and zoom in on it, the object will become out of focus if you zoom in too far. The focus adjusts automatically when zooming unless the Onsight 2500 is in **Manual Focus** mode.

2. If you need to get very close to your subject, set the zoom level to 1x (minimum zoom) and move the Onsight 2500 until you reach the desired image size. This will ensure that you achieve the best focus.

6.6   Focusing

6.6.1   Automatic Focus

The Onsight 2500 normally operates in automatic focus mode and will focus on subjects centered in the Viewfinder. Focus will continuously update as the distance between the subject and the lens changes or as zoom is adjusted.

There are situations where manual control is desired to fine tune the focus, particularly for objects not centered in the Viewfinder. Manual focus control is described in paragraph 6.6.2, Manual Focus, on page 24.

Note that zoom and focus controls are available regardless of whether the Viewfinder is currently displayed.

6.6.2   Manual Focus

1. Use the **Zoom** buttons ▄▄ in combination with the **Manual Focus** 🄼🄵 button.
2. Refer to the table below for an explanation of the various manual focus options:

Manual focus options	Instruction
Switch to manual focus and increase or decrease manual focus by one step.	While pressing and holding the **Manual Focus** button, press and release a **Plus** (+) or **Minus** (–) button once. When you release the **Manual Focus** button, the Onsight 2500 remains in manual focus mode, locked at the focus level you set. Note that the **Manual Focus Mode** icon 🄼🄵 now appears on the screen.
Switch to manual focus and increase or decrease manual focus at a standard rate.	While pressing and holding the **Manual Focus** button, press and hold a **Plus** (+) or **Minus** (–) button until you reach the setting you want. Then release the buttons. When you release the **Manual Focus** button, the Onsight 2500 remains in manual focus mode, locked at the focus level you set. Note that if you are already in manual focus mode (the **Manual Focus Mode** icon 🄼🄵 will be shown on the screen), then it is not necessary to hold down the **Manual Focus** button while using the **Plus** (+) or **Minus** (–) buttons.
Switch from manual focus to automatic focus mode.	Press and release **Manual Focus** button without pressing **Plus** (+) or **Minus** (–).
Set a temporary focus lock.	Press and hold **Manual Focus** button without pressing **Plus** (+) or **Minus** (–). The focus stays locked for as long as you continue to hold the **Manual Focus** button. Automatic focus mode resumes when you release it.

6.7   Telestration (Drawing Lines on the Viewfinder)

Telestration permits the Onsight 2500 operator or the Onsight Connect user to draw freehand lines on a still image, recording, or live media stream using the stylus. Telestration markings appear simultaneously on both the Onsight 2500 and the Onsight Connect user's display. The system is configured so that lines drawn by the Onsight 2500 operator and the Onsight Connect users appear in different colors.

Tap the **Telestration** icon to show, hide, or remove existing telestration lines.

Lines drawn by the operator appear in a different color from lines drawn by the Onsight Expert user.
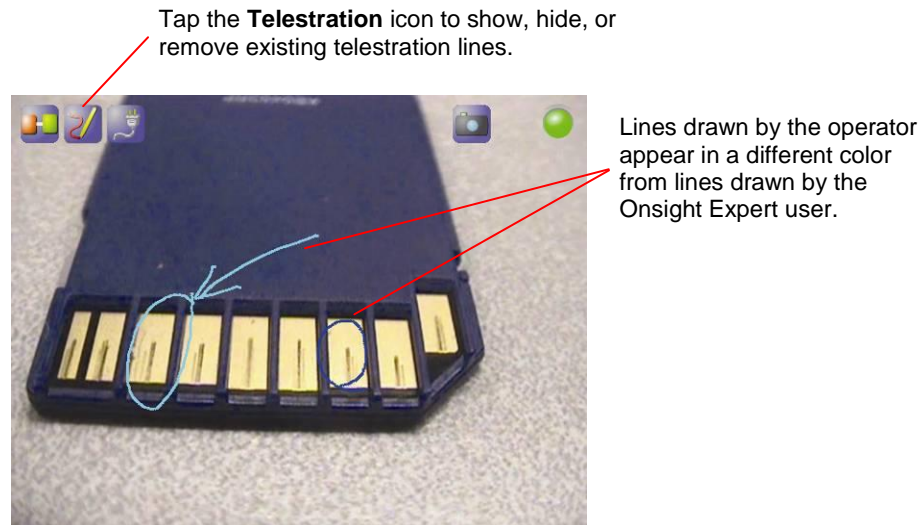
Telestration is shown on the Viewfinder when streaming media and still images.

Once telestration lines have been added, a **Telestration** icon appears in the Viewfinder.

6.7.1   Telestration while Streaming Live Video

Telestration can be made prior to or during streaming. Once streaming begins, any telestration made prior to the start of streaming will be seen by the Onsight Connect call participants.

➔ To start live streaming:

1.   Press the green **Share** button on the top of the Onsight 2500 to start streaming video.

➔ To display the **Telestration** menu:

1.   Once the **Telestration** icon appears on the viewfinder, Press and hold the **Telestration** icon to display the menu.
2.   Options in the menu allow you to select which telestration lines to show or hide and which lines to erase.

➔ To change telestration visibility preferences:

1.   Click on the checkbox next to the user to enable telestration visibility. The initial default state is that all participants are checked (☑).

➔ To erase telestration:

1.   Tap the button of the participant in the **Erasure** column. Erasing Telestration will remove it for all call participants.

6.7.2   Telestration while Sharing Recorded Video

➔ To display the **Telestration** menu:

1.   Tap the **Telestration** icon .

2.   Options in the menu allow you to select which telestration lines to show or hide and which lines to erase.

➔ To change telestration visibility preferences for a recorded video:

1.   Click on the checkbox next to the user to enable telestration visibility.

> *Showing or Hiding telestration is specific to the local device user. The telestration on Onsight Connect will not be affected.*

> *Erasing telestration on a recorded video is not permanent.*

6.7.3   Telestration Colors

Telestration colors can be changed by using the **Configuration** menu, the **Telestration** icon, or the **Call Status** screen. They can be edited for all call participants. Color changes made during a call are temporary. The default colors will be used whenever a new call is started.

> *If an endpoint changes your color (My Current Color), this is only a temporary color change, and your color will revert back to the default color when the call is disconnected, unless Save As Default has been selected.*

> *The color changes are also updated to the same colors for all call participants.*

➔ To change color preferences using the menus:

1.   From the standard Viewfinder display window, press the **Display** button 🔲 three times (or until the **Main Menu** appears).

2.   Tap **Configuration**.

3.   Tap **Display** and then **Telestration**.

4.   The **Telestration** screen appears.
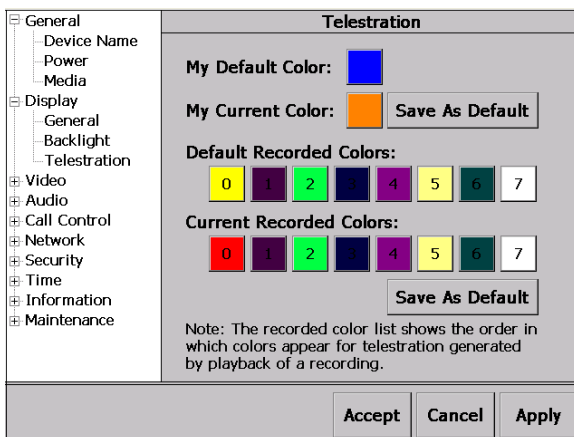
My Current Color and Current Recorded Colors are shown if there was a color change made from the default color.
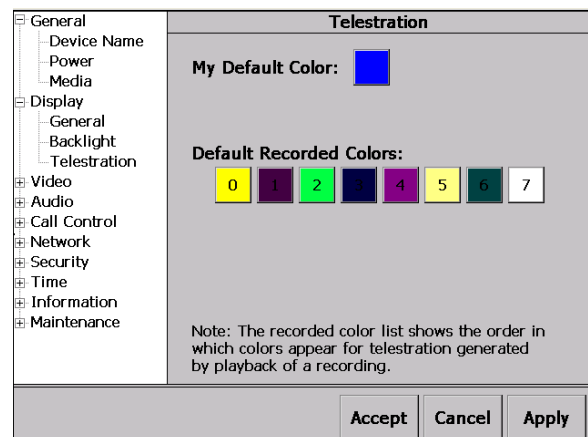
My Current Color and Current Recorded Colors are *not* shown *until* there is a color change made from the default color.

5.   Tapping a color will bring up a **Colors** palette from which a new color can be selected.

6.   Any color change made to **My Default Color** becomes the new default color. Alternatively, the **My Default Color** can be changed to a new default color by selecting **Save As Default** for **My Current Color**:

•   **My Default Color** becomes the new default color if it is changed.

- **My Current Color** becomes **My Default Color** if **Save As Default** is selected.

7. Any color change made to **Default Recorded Colors** becomes the new default color. Alternatively, the **Default Recorded Colors** can be changed to a new default recorded color by selecting **Save As Default** for **Current Recorded Colors**:

   - **Default Recorded Colors** becomes the new default color if it is changed.
   - **Current Recorded Colors** becomes **Default Recorded Colors** if **Save As Default** is selected.

   *If an endpoint changes the current recorded color (**Current Recorded Colors**), this is only a temporary color change, and the color will revert back to the default recorded color (**Default Recorded Colors**) when the call is disconnected, unless **Save As Default** has been selected.*

8. Select **Accept**, **Cancel**, or **Apply**.

   *If you want to accept the change in color, but wish to stay in the **Telestration** screen, then **Apply** should be selected.*

➔ To change color preferences using the **Telestration** icon:

1. Tap and hold the **Telestration** icon.
2. The **Telestration** menu appears.
3. Tap the desired **Colors** button.
4. Tapping a color will bring up a **Colors** palette from which a new color can be selected for the selected call participant.
5. To accept the color change, tap the **Telestration Colors** screen.

   When the call is disconnected, the color will revert back to the default color.

   To save the color change as a default color, use the **Main Menu > Configuration > Display >Telestration** screen.

➔ To change the color preference using the **Call Status** screen:

1. Tap the **Call Connected** icon.
2. The **Call Status** screen appears with information on all call participants.
3. Tapping a color will bring up a **Colors** palette from which a new color can be selected for the selected call participant.
4. The color change is temporary. The default colors will re-appear when in a new call, or if the Onsight 2500 is powered on again.

   To save your color change as a default color, use the **Main Menu > Configuration > Display >Telestration** screen.

6.8   Capturing and Sharing Images

The Onsight 2500 can capture still images for local viewing; share the captured image live with Onsight Connect (see paragraph 6.8.2, Sharing a Live Image, on page 29); or share a captured image with Onsight Connect at a later time (see paragraph 6.8.3, Sharing a Saved Image, on page 31). Shared images can be seen by all endpoints in a conference call.

Images shared during a session while privacy is enabled are maintained in transient storage and are never written to permanent storage. While a call is active, images are accessible in the temporary storage area within the image viewing window. When the call is terminated all temporary images are destroyed.

6.8.1   Capturing Still Images for Local Viewing Only

➜ To capture a still image without sharing:

1. Ensure you are disconnected from Onsight Connect.
2. Press the **Capture** button on the top of the Onsight 2500 (the **Capture** button behaves like the shutter button on a digital camera).

     Note that if there are telestration lines, these are captured as part of the image.
3. The captured image is displayed briefly on the Viewfinder and then cleared.
4. To view the image taken, tap on the **Start Image Display** icon .
5. The message "**Image display started**" appears and the image is displayed on the Viewfinder.
6. The image is saved locally in the session folder on the SD card.

> Tip   If you want to view the captured image immediately on the Viewfinder, press and hold the **Capture** button for a few seconds when taking the picture. The message "**Image display started**" will appear and the still image will remain on the Viewfinder.

➔ To end still image viewing:

1. Tap the **Image Displayed** icon ▣.
2. The **Still Image Details** screen will appear.
3. Tap **End Still Image Display** to clear the image from the Viewfinder. At this point you can also clear the **Image Displayed** icon by checking off the **Clear still image quick access icon** checkbox.

    (Tip) Another way to clear the image from the Viewfinder is to briefly press the **Capture** button instead of tapping the **Image Displayed** icon.
4. The message **"Image display ended"** appears and the image is cleared from the Viewfinder.
5. If the **Image Displayed** icon was not cleared in step 3 then you can view the image again by tapping the **Start Image Display** icon 🔳.

6.8.2   Sharing a Live Image

The Onsight 2500 and Onsight Connect endpoint can collaborate by sharing images with each other while in a call, whether video sharing is on or off.

➔ To capture and share an image:

1. Connect to an Onsight Connect endpoint.
2. Press the **Capture** button on the top of the Onsight 2500 (the **Capture** button behaves like the shutter button on a digital camera).

    Note that if there are telestration lines, these are captured as part of the image.
3. The captured image is displayed briefly on the Viewfinder and then cleared. Any telestration will remain.
4. To view the image taken, tap on the **Start Image Share** icon 🖼.
5. The message "**Image sharing started**" appears and the image is displayed on the Viewfinder and all connected Onsight Connect endpoint Image Viewers.

    (i) *If streaming and the **Configuration > General > Media** option "**While sharing an image, the video: Stops**" is set then when a capture occurs, the streaming video is turned off in the Viewfinder and the Onsight Connect Call window. Two messages appear: "**Preparing to share the image**" and "**Stopping the stream**". Streaming video will return once the **Capture** button is pressed or you tap on the **Image Shared** icon 🖼 to end image sharing. For more information on the video options in the **Media** menu, see paragraph 7.7, Configuration, on page 39.*

6. The image is saved locally in the session folder on the SD card.

> (Tip) If you want to share the image and view the captured image immediately on the Viewfinder, press and hold the **Capture** button for a few seconds when taking the picture. The message "**Image sharing started**" will appear and the shared image will remain on the Viewfinder and on the Onsight Connect endpoint Image Viewer.

➔ To end sharing:

1. Tap the **Image Shared** icon 🖼️.
2. The **Still Image Details** screen will appear.
3. Tap **End Still Image Sharing** to clear the image from the Viewfinder. At this point you can also clear the **Image Shared** icon by checking off the **Clear still image quick access icon** checkbox.

> (Tip) *Another way to clear the image from the Viewfinder is to briefly press the* ***Capture*** *button instead of tapping the* ***Image Shared*** *icon.*

4. The message **"Image sharing ended"** appears.

> (i) *The image will still remain on the Onsight Connect endpoint's Image Viewer.*

> (i) *If previously streaming and **While sharing an image, the video: Stops** was set, streaming will now continue again.*

5. If the **Image Shared** icon was not cleared in step 3 then you can view the image again by tapping the **Start Image Share** icon 🖼️.

6.8.3   Sharing a Saved Image

→ To share a saved image:

1. Connect to an Onsight Connect endpoint.
2. Press the **Display** button ⬚ repeatedly until the **Main Menu** appears.
3. Tap **File Browser**.
4. The **File Browser** window appears.
5. Tap the folder containing the image that you want to share. Image thumbnails appear in the pane to the right.
6. Select the image you want to share and tap **Share** in lower left pane.

    > *You can preview the image before sharing it by selecting the image and then tapping* **Preview**.

7. The message "**Image sharing started**" will then appear.
8. The Onsight 2500 sends the image to Onsight Connect endpoint.
9. To end sharing, refer to the instructions on page 30.

6.9   Recording and Playing Videos

The Onsight 2500 can record video to an SD memory card independent of its call state. That is, it can record while connected, disconnected, or calling. The only time that it cannot record is while it is playing back a previously recorded video.

Recording can be disabled for privacy or security reasons. When recording is disabled, video, audio and images can not be stored either internally or to removable media. If recording is disabled by any call participant then recording is disabled for all participants. If recording is enabled, either the 🟢 or 🔘 icon will be displayed.

The Onsight 2500 is able to record:

*   video
*   subject audio
*   2-way voice
*   images
*   telestration

> *Do not remove the SD card while recording. This can corrupt the card data.*

6.9.1   Recording a Video

Video recordings include any telestration lines made during the recording. Telestration lines will appear when you play or stream a video recording, although they will be in different colors.

When you share an image while recording a session, the image appears in the recording.

→ To record a video:

1. Press the **Record** button 🔴 on the back of the Onsight 2500.
2. The message "**Please wait – record is starting**" appears briefly. The **Record** icon 🔴 in the top right of the Viewfinder appears when recording starts.
3. To stop recording, press the **Record** button again.

    > *The Onsight 2500 saves the recording in the location on the SD card specified in **Main Menu > Configuration > General > Media**. See paragraph 7.7, Configuration, on page 39 for more information. The file name is based on the date and time of the recording.*

6.9.2   Playing a Video Recording Locally (not in a Call)

➔ To play back a video just recorded or to replay a previously recorded video:

1. Press the **Display** button ▣ on the back of the Onsight 2500 three times to display the **Main Menu**.

2. Tap **File Playback** or tap **File Browser** to select a recorded video to play.

   > Tip Use **File Playback** to play the last video recorded or the last video played, whichever is more recent.

3. The **Video Playback** screen appears.

   > Tip You can hide the status bar located at the bottom of the screen by tapping the **Pin** icon located in the left corner. This is useful if telestration appears at the lower part of the screen as it may get covered up by the status bar.

4. Tap the **Play** icon ▶ to start the video.

   > Tip If you don't want to play the entire video, you can use the playback slide bar to move to a different point in the recording, during play or while paused. When you find the desired place, press the **Play** icon to continue playing the recorded video.

   > Tip To switch to the **File Browser** from the **Video Playback** screen, tap the file name just under the track playback slide bar.

5. When finished, tap ✖ to exit back to the Viewfinder.

6.9.3   Sharing a Video Recording

You can stream previously recorded video to Onsight Connect endpoints.

When streaming video recordings, the Onsight 2500 adjusts the current stream parameters to match the frame rate, resolution, bit rate, etc. of the recording.

Onsight Connect endpoints can also stream a previously recorded video to the Onsight 2500. Playback controls operate the same as when the Onsight 2500 is streaming the video.

> ℹ *You cannot stream live video and a recording simultaneously.*

➔ To share a recorded video:

1. Connect to Onsight Connect endpoint.

2. If the Onsight 2500 is streaming live video, press the **Sharing** button on the top of the Onsight 2500 to stop streaming.

3. Press the **Display** button ▣ on the back of the Onsight 2500 three times to display the **Main Menu**.

4. Tap **File Playback** or tap **File Browser** to select a recorded video to play.

   > Tip Use **File Playback** to play the last video recorded or the last video played, whichever is more recent.

5. The **Video Playback** screen appears.

6. Press the **Play** icon or the **Sharing** button to start playing and streaming the video.

   > ℹ *If the video contains a captured image, the Viewfinder will display the captured image. Onsight Connect endpoint will continue to see the video since the image will be displayed in the Onsight Connect endpoint's Image Viewer.*

> Tip If you don't want to stream the entire video, you can use the playback slide bar
> to move to a different point in the recording, during play or while paused. When
> you find the desired place, press the **Play** icon to continue streaming the
> recorded video.

> Tip To switch to the **File Browser** from the **Video Playback** screen, tap the file
> name just under the playback slide bar.

7. When finished, tap ✖ to exit back to the Viewfinder.

7   Menus

The Onsight 2500 has a menu system that allows operators to check and update system settings, view status, access the directory or sign out from the Onsight 2500.

Note that system configuration and other setup tasks are usually performed by your Onsight system administrator and are described in the *System Administration Manual*.

7.1   Main Menu

Access to the **Main Menu** is by using the **Display Mode** button ▣. The **Main Menu** is used for configuration and other setup options.

➔ To access the **Main Menu**:

1. Press and release the **Display Mode** ▣ button three times.
2. The **Main Menu** appears.
3. To exit this menu, press and release the **Display Mode** button.

> *The **Display Mode** button cycles through additional display modes. See section 5, Viewfinder, on page 18 for more information.*

You can display the menus at any time, even while sharing media to Onsight Connect endpoints. The person on the receiving end will not see the menus.

7.2   Stream Setup

➔ To check or change streaming setup options:

1. Starting from the default Viewfinder display, press the **Display** button ▣ three times to display the **Main Menu**.
2. From the **Main Menu**, tap **Stream Setup** and select one of the configurations from the **Choose stream profile** drop-down menu and then tap **Accept**.
3. To set up a custom media configuration, tap **Add** to display the custom stream configuration window. This allows a user to configure the stream parameters for circumstances where the predefined settings are not adequate.
4. Select your configuration options, and then select **Accept**.

> *The 2500 does not support HD quality resolutions therefore it cannot send or receive 1080p or 720p video configurations.*

7.3   Checking Status

The **Main Menu** offers a number of options for checking status, as shown below.

➔ To view status information:

1. Starting from the default Viewfinder display, press the **Display** button ▣ three times to display the **Main Menu**.
2. From the **Main Menu**, tap the **Status Menu** option to display a second menu with the status options.
3. Tap a status option to view a **Status** screen for that item. For example, **Power Status**.
4. To dismiss a **Status** screen and return to the **Status** menu, tap it with the stylus, or press the **Display** button.

Contact your Onsight system administrator for more information on any particular status item and what it means.

7.4

7.5   Directory - Viewing Contacts

7.5.1   Contacts

The **Contacts** directory contains a list of names and addresses that can be called from the Onsight 2500. If you are connected to the Onsight Account Service, you can use the **Global Contacts List** and **Search** function in the **Global Contacts** tab to display names of contacts to add to the **Contacts** list. Select one or more names and then click **Add to Contacts** to add these names to your **Contacts** tab.

➔ To display the **Contacts** directory:

1. Starting from the default Viewfinder display, press the **Display** button 🔲 three times to display the **Main Menu**.
2. Press the **Send** button 🔘 to display the **Contacts** directory.
3. Select a name and then tap **Dial** to make the call.

If you are logged in as a user with Onsight administrator privileges, you may edit or delete existing contacts or create new ones. Note that these changes are not forwarded to other devices.

*New contacts are created in the **Personal Group**. Shared contacts are created in the **Shared Group** by Onsight system administrators.*

7.5.2   History

The **History** tab provides a convenient way to review and re-establish a previous call as it lists the most recent calls. The default for the number of calls listed is 20, but this can be changed by the accessing the **Main Menu > Configuration > Call Control > General** screen.

You can initiate a call by selecting a name in the History list and then tapping **Dial**.

7.6   File Browser

The **File Browser** allows you to organize and play recorded videos, display and share images, and manage folders and files on the SD memory card.

> Tip   You can connect the Onsight 2500 to a PC via the USB cable. This allows easy file transfer from the device's SD memory card to the PC. Note that the device can't be used to record while it is connected to the PC via USB.

➔ To display the File Browser directory:

1. Starting from the default Viewfinder display, press the **Display** button ▣ three times to display the **Main Menu**.

2. From the **Main Menu**, tap **File Browser** to display the **File Browser** screen.

The **Folder** pane displays the folders containing video recordings and image snapshots. Use the scroll bar to browse through long lists of folders.

The **File** pane displays the image snapshots and video recordings saved in the selected folder on the SD card. Use the scroll arrows on the right to browse through long list of files.

The options in the **Controls** list allow you to:

- Rename folders and files
- Create new folders
- Delete folders and files
- Play video recordings
- Preview still images
- Share still images
- Format the storage card

Session Folders and File Names

When you capture a snapshot or record a video, the Onsight 2500 creates a session folder on the SD card in which it saves these files. The name of the folder is based on the date, time, and user names using the convention:

yymmdd_hhmmss_Onsight 2500 user

where:

- *yymmdd* is the date of the session
- *hhmmss* is the time that the session started (present only if connected to Onsight Connect endpoints)
- *Onsight 2500 user* is the user name that is logged into the Onsight 2500

e.g. 090910_132520_Librestream2500

The snapshot and recording file names are based on their media type, a serial number, the source, and a version number. File names use the convention:

media_serial#_source_version#.extension

where:

- *media* is either IMG for a snapshot or REC for a recording

- *serial#* is a sequential number assigned by the source device
- *source* is either A for Onsight Connect endpoints or D for Onsight 2500
- *version#* is a sequential number that is added if an image has been modified during sharing
- *extension* is either *.jpg* for snapshots or *.lmc* for recordings

e.g. IMG_00003_D.jpg (for a local snapshot) or IMG_00003_A.jpg (for a remote snapshot)

File Pane Icons

Files listed in the **File** pane are displayed as either image thumbnails or file icons.

Icon	Description
	Image file. Snapshots usually appear as thumbnails but if the Onsight 2500 cannot display a thumbnail, it displays the **Image File** icon.
	Video recording file.
	Configuration file (files with an .XML extension)

7.6.1 Rename Files and Folders

➔ To rename a file or folder:

1. Select the file or folder you want to rename.
2. Tap **Rename**.
3. The on-screen keyboard appears.
4. Using the stylus, tap the characters on the keyboard to enter a new name.
5. Tap **Rename** in the **Rename File or Rename Folder** screen, as applicable.

7.6.2 Playing Videos

➔ To play a video:

1. Using the **Folder** and **File** panes, select the video you want to play.
2. Tap **Play**.
3. The video playback controls appear. See paragraph 6.9, Recording and Playing Videos, on page 31 for information on using the **Video Playback** screen.
4. Tap the **Play** icon ▶ to start the playback.

When streaming video recordings, the Onsight 2500 adjusts the current stream parameters to match the frame rate, resolution, bit rate, etc. of the recording.

*By selecting **Properties** in the File Browser for a selected video, the **Playback Status** screen provides information including duration and track properties.*

7.6.3 Viewing an Image Locally

If privacy is required in viewing an image, there are two ways to view that image on the Onsight 2500 without sharing it with Onsight Connect endpoints.

- Disconnect from Onsight Connect endpoints and open or preview the image.
- Preview the image if connected to Onsight Connect endpoints.

➔ To display an image locally (the image is not shared with Onsight Connect endpoints):

1. Open the **File Browser**.
2. Using the **Folder** and **File** panes, select the image you want to view.
3. If disconnected from Onsight Connect endpoints, tap **Open** or **Preview**. If connected to Onsight Connect endpoints, tap **Preview**.
4. The Onsight 2500 displays the image.

➔ To end still image display:

1. If **Preview** was selected to view the image, tap the image to close the image.
2. If **Open** was selected to view the image, press the **Capture** button *or* tap the **Image Displayed** icon 🖼.
3. If the **Capture** button was used to end the still image display then the image is cleared from the Viewfinder, but if the **Image Displayed** icon was selected to end the still image display, then the **Still Image Details** screen appears.
4. Tap **End Still Image Display**.
5. The image is cleared from the Viewfinder.

7.6.4   Sharing an Image with Onsight Connect endpoints

See paragraph 6.8.3, Sharing a Saved Image, on page 31.

7.7   Configuration

ⓘ *When using the Onsight Account Service, any changes that are made to your contacts, password, and My SIP Settings **will be available on any Onsight endpoint on which you are connected to the Onsight Account Service**.*

➔ To check or update Onsight 2500 configuration options:

1. Starting from the default Viewfinder display, press the **Display** button ▣ three times to display the **Main Menu**.
2. From the **Main Menu**, tap the **Configuration** menu to display the configuration options.
3. From here, follow on-screen instructions to adjust the configuration options as necessary.

The table below is provided as an overview. Please see the *System Administration Manual* for detailed information on Onsight 2500 configuration.

ⓘ *Your Onsight system administrator may have configured company specific default settings and access rights.*

Screen	Configuration Options Overview
General	Adjust the standby timeout (amount of time before the Onsight 2500 will switch from On to Standby, if it is idle). Specify the location of saved images and video recordings, and video options while sharing an image.
Display	Adjust the brightness of the Viewfinder backlight or recalibrate the touch panel. Change telestration colors.
Video	Adjust the video settings of the camera and select the video source (internal camera or external via S-Video connector). Provides option to display the time and date in video.
Audio	Options for controlling volume and mute levels for the speaker. You can set the maximum ring volume (the volume will ramp up to this setting regardless of the overall volume setting of the Onsight 2500) and request voice/audio reduced bandwidth usage. You can also select the source for Subject Audio – either the built-in microphone or the Audio line-in connector. The level of the external audio input can be adjusted using the Gain slide bar.

Screen	Configuration Options Overview
	The Onsight 2500 provides an option to enable Bluetooth audio.
Call Control	Configure auto answer and the ability of starting video upon connection. Maximum call history number can be selected.
	SIP, SIP settings, and Bandwidth controls can be adjusted.
	My SIP Settings – Private and Public SIP settings associated with the User that has logged in to the device. These settings are configured by the *Onsight Account Manager* or *Onsight Management Suite*.
	Device SIP Settings – Private and Public SIP settings associated with the device, these settings are used regardless of who logs in to the device if the **SIP-Register Using:** setting has been set to **Device Settings**. These are typically configured by the Onsight System Administrator.
	Enter Cisco Presence settings to connect to the Cisco Unified Presence Server.
	Please see the *System Administration Manual* for detailed instructions.
Network	This screen allows you to adjust Network settings, including options to enable or disable the radio and select radio channels, firewall settings for connection from remote locations, and a hotspot login. In addition, the Onsight 2500 Bluetooth capability can be enabled/disabled from the Network screen.
	There are options to configure the Onsight 2500 for remote management by the Onsight Management Suite.
	Please see the *System Administration Manual* for detailed instructions.
Security	This screen allows you to set default login options and import security certificates.
	Allow wireless configuration prior to login.
	Encryption and Privacy options are selectable.
Time	Follow on-screen instructions to adjust time and date settings.
Information	Onsight 2500 version and copyright information.
Maintenance	Software updates may be done from this screen (consult the *System Administration Manual*).
	Change user passwords and import contacts and users. (Note that password changes are not forwarded to other devices.)
	Call history can be cleared.

7.8   Invite a Guest

You can invite a guest to join an Onsight video session. The guest will receive an email which provides instructions on how to download and install the Onsight Connect endpoint software.

You must be connected to the Onsight Account Service.

➔ To invite a guest:

1. Starting from the default Viewfinder display, press the **Display** button 🖳 three times to display the **Main Menu**.

2. From the **Main Menu**, tap **Directory** and then the **Invite Guest** tab.

3. Enter the required information and a message if desired. Select the number of days the guest can use Onsight Connect.

4. Click **Send Invitation**.

5. The guest is automatically added to your **Contacts** tab.

8   Power Management

8.1   Standby Mode

Standby mode provides longer battery life by shutting down the display and putting the camera into a low power mode. However, incoming calls will still be received. The Onsight 2500 can be put into Standby mode manually or automatically after a configurable amount of time. By default, the Onsight 2500 is set to automatically enter Standby mode after 2 minutes of inactivity.

➔ To enter Manually enter Standby mode:

1. Turn the Onsight 2500 on.

2. Press and release the **Power** button ⏻ to enter Standby mode.

3. If a call was active, a prompt is displayed asking for confirmation to terminate the call. A message is displayed indicating that the Onsight 2500 is entering Standby.

4. When the Onsight 2500 is in Standby mode, the **Power** indicator LED ⏻ is green. This is the only visible indication that the Onsight 2500 is in Standby mode and is capable of receiving incoming calls.

➔ To come out of Standby:

1. Press the **Power** button ⏻ or answer an incoming call.

2. If the device is configured to require that you log-in when resuming from Standby (this is set in **Main Menu > Configuration > Security > Login)**, you can answer a call but you must log in again before you can proceed further, i.e. to use the Onsight 2500 to stream video, access menus, or perform other functions. You can still access the **Status Menu** and its options without logging in though.

➔ To set Automatic Standby mode:

1. From the standard Viewfinder display window, press and release the **Display** button 🖳 three times (or until the **Main Menu** appears).

2. Tap the **Configuration** option with the stylus to display the **Configuration** screen.

3. Select **General** and then **Power**.

4. Set the time in the **Standby Timeout** field. Enter a time of '0' to disable automatic Standby mode.

5. Click **Accept** to accept the change and exit the **Configuration** menu. Click **Apply** to accept the change but remain in the **Configuration** menu. Click **Cancel** to cancel the change and exit the **Configuration** menu.

8.2 Resetting the Onsight 2500 (Soft Reset)

If the Onsight 2500 becomes non-responsive and you cannot turn it off by pressing the **Power** button for two seconds, a soft reset may be required.

➔ To reset the Onsight 2500:

1. Press and hold both the **Power** ⏻ and **Display** ▣ buttons until the display clears (approximately 10 seconds).

2. Do *not* perform a soft reset on the device unless it stops responding to normal operations.

<p style="text-align:center">**CAUTION:**</p>

<p style="text-align:center;color:red">**A hard reset can be generated using the reset switch accessible inside the battery compartment in the Onsight 2500.**</p>

<p style="text-align:center;color:red">**The hard reset should not be used by non-service personnel because damage to the Onsight 2500 file system may result.**</p>

9   Parts of the Onsight Rugged Smart Camera

9.1.1   Onsight 2500
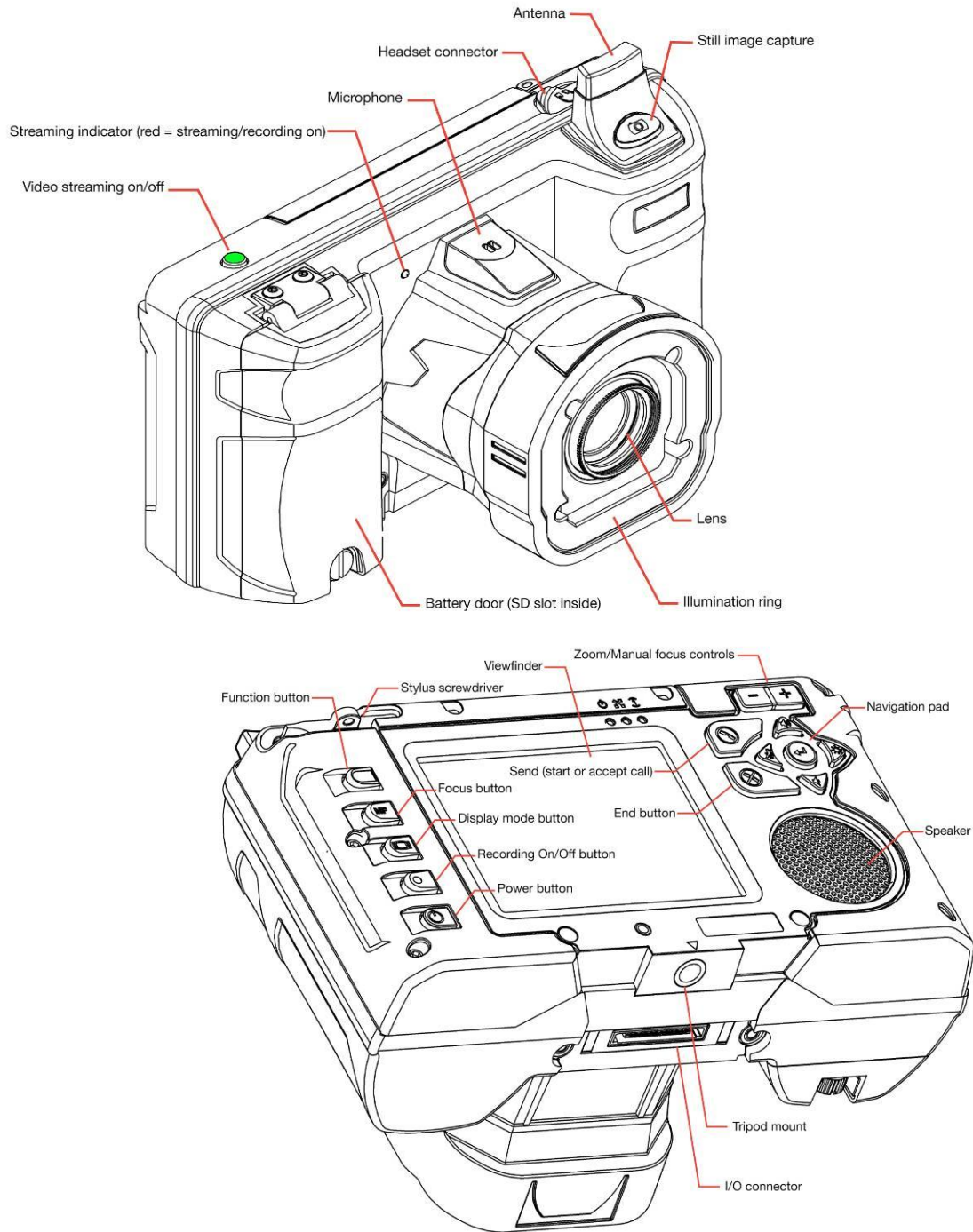
Figure 1 – Onsight 2500

> ⚠️ Before operating the Onsight 2500 Device, you must read the Onsight 2500 Regulatory and Safety Guide.

See paragraph 9.2 on page 48 for a description of the Onsight 2500 accessories.

9.1.2   Control Buttons

Function (Onsight 2500 only)

Manual focus

Display mode

Record

Power
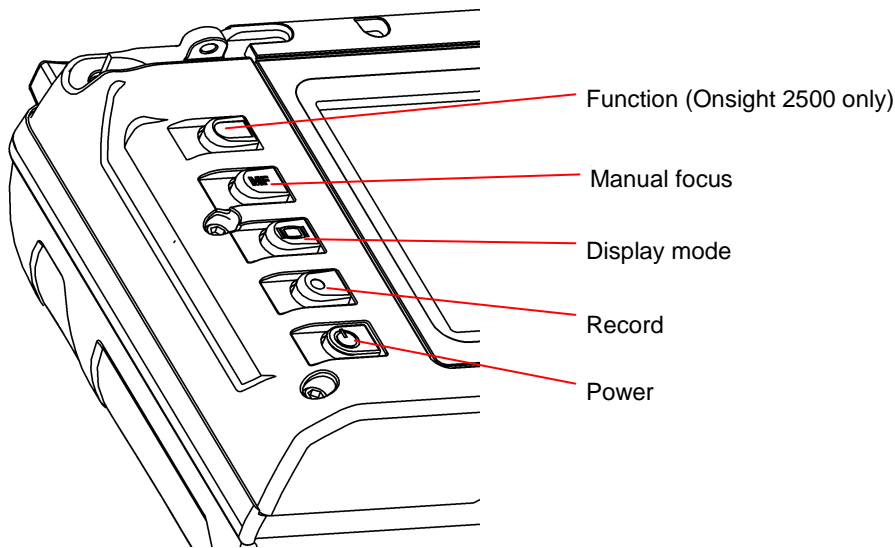
Figure 2 – Control Buttons

Button	Name	Function
	Function (Onsight 2500 only)	Holding this button allows the use of the control buttons of the Navigation pad while navigating a menu on the Viewfinder.
	Manual Focus	Use this button to set the focus manually or to resume automatic focusing. It works in combination with the Zoom buttons. See paragraph 6.6, Focusing, on page 24 for more information.
	Display Mode	This button cycles through the Onsight 2500's multiple display modes. See section 5, Viewfinder, on page 18 for more information.
	Record	Press this button to start/stop recording to a local Secure Digital (SD) memory card.
	Power	This button controls On/Off/Standby modes. See paragraph 2.4, Turning Power On or Off, on page 9 for more information.

For the Power row, the following table appears:

If device status is…	Power button function
Off	Press and release the button to turn the power on.
On	Press and release the button to go to Standby mode.
Standby	Press and release the button to enter Power On mode.
On or Standby	Press and hold the button for two seconds to turn the unit off. A shutdown message appears.

9.1.3   Navigation Pad Buttons

These context-sensitive buttons control audio volume, microphone mute and the illumination ring. They also function as command buttons and directional buttons for the menus.
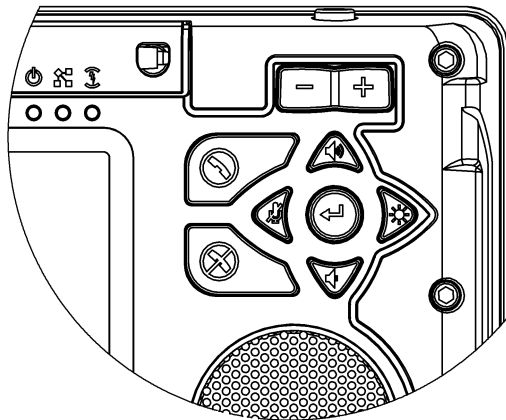

Figure 3 – Navigation Pad Buttons

Button	Function	Menu Function
	Start or accept call (Send)	OK or Enter
	End a call or reject an incoming call invitation	Cancel
	Increase volume	Up arrow
	Microphone mute	Left arrow
	Decrease volume	Down arrow
	Front illumination light: Onsight 2500: normal/macro/off	Right arrow
	Enter/Freeze	Accept

*To use the functions of the Navigation pad (e.g., **Microphone mute**) while navigating a menu, press and hold the **Function** button, then press the navigation button.*

9.1.4   Zoom/Manual Focus Control

The **Zoom** buttons ▬▬ are located on the back of the Onsight 2500, directly above the Navigation pad (see Figure 3 on page 46). These allow the operator to set zoom levels on the camera or to set focus manually.

The **Manual Focus** 🅼🅵 button is located on the back of the Onsight 2500 on the left side (see Figure 2 on page 45). To set the focus manually, see paragraph 6.6.2, Manual Focus, on page 24.

9.1.5   Indicators

| Indicator	Name	Explanation
⏻	Power mode indicator	Green = On or Standby
⛶	Network indicator	Green = Connected to network Off = Not connected to network
🔋	Battery/power indicator	Orange = Battery is charging Off = Battery is charged or power is not connected
	Stream/record	Red = streaming/recording on Off = streaming/recording off
	Ethernet port	Establish the Ethernet connection before powering on the Onsight 2500. On the Onsight 2500, the Ethernet port is located on the I/O Sled accessory. The Ethernet port includes two LED indicators. Yellow On = a wired network link exists Yellow Flashing = indicates wired network activity Yellow Off = no wired network link Green On = 100 Mbps Green Off = 10 Mbps

9.2   Onsight 2500 Accessories

The Onsight 2500 comes with an I/O Cover.

9.2.1   I/O Cover

⚠ Before removing the I/O Cover or before using the Onsight 2500Ex Device without the I/O Cover installed, you must read the Onsight 2500 Regulatory and Safety Guide. ***The I/O cover MUST be installed when operating the 2500EX in hazardous locations.***
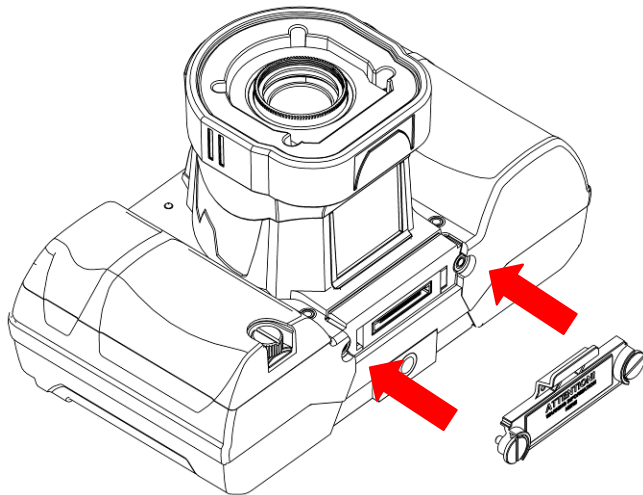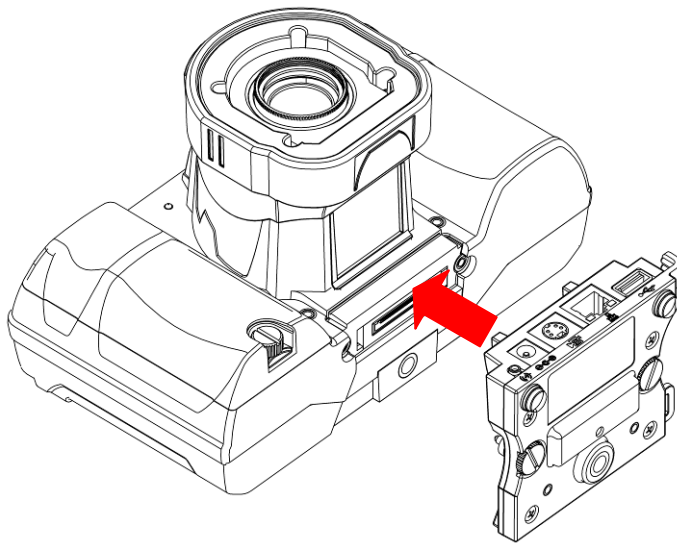

The I/O Cover comes attached to the camera and can be removed using the stylus screwdriver. The I/O Cover seals and protects the I/O Connector so that the I/O Connector is not exposed. Remove the I/O cover when attaching the I/O Sled or Power Sled.

9.2.2 I/O Sled

The I/O Sled is used to charge the battery and access the Audio-in, S-Video, and Ethernet features of the Onsight 2500. To attach the I/O Sled, insert into the I/O Connector of the Onsight 2500. Tighten the thumb screws with the stylus screwdriver.
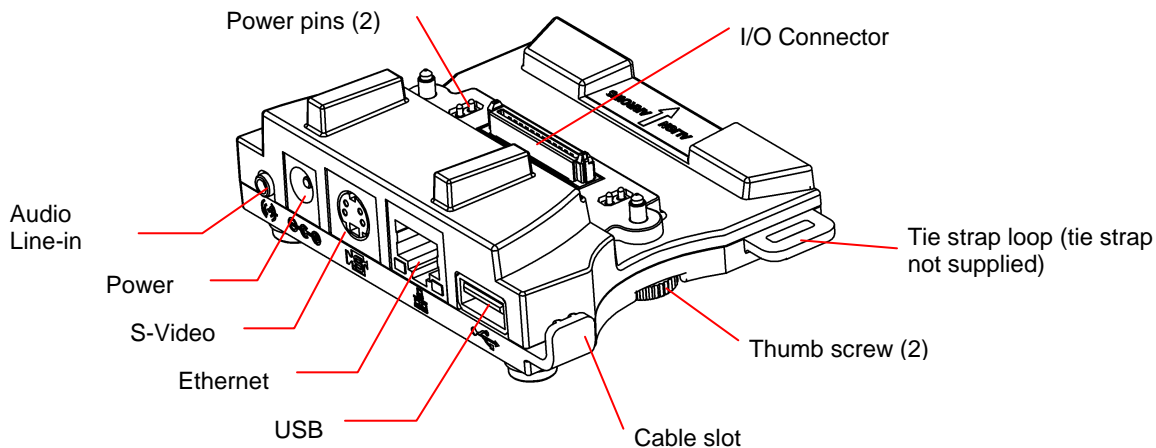
> ⚠️ Before using the I/O Sled with the Onsight 2500Ex, you must read the Onsight 2500 Regulatory and Safety Guide.

The parts of the I/O Sled accessory are as follows:
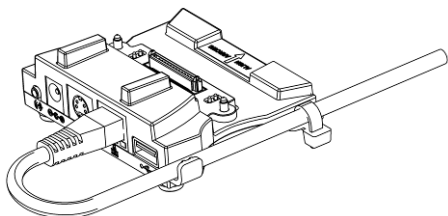

I/O Sled showing cable management

Power pins (2)

I/O Connector

Audio Line-in

Power

S-Video

Ethernet

USB

Cable slot

Tie strap loop (tie strap not supplied)

Thumb screw (2)

9.2.3   Power Sled

Attach the external Power Sled in order to operate the Onsight 2500 from external power and/or to charge the battery. Remove the I/O Cover, insert the Power Sled into the I/O Connector, and tighten the thumb screws with the stylus screwdriver.

> ⚠ Before using the Power Sled with the Onsight 2500Ex, you must read the Onsight 2500 Regulatory and Safety Guide.
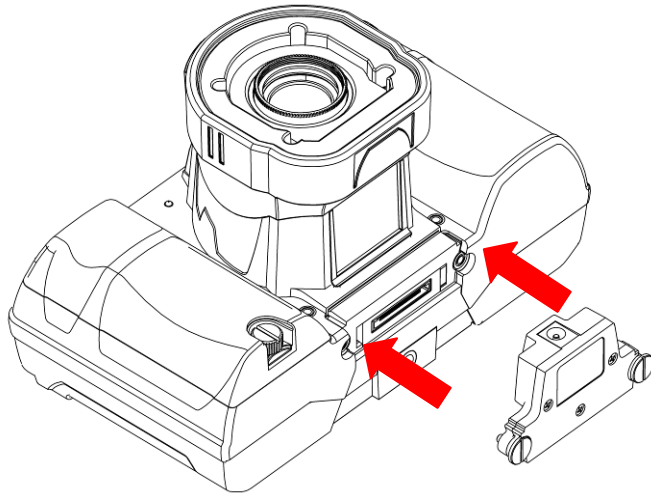
9.3   User Interface Features

9.3.1   Viewfinder

The display on the back of the Onsight 2500 functions as a camera viewfinder. By default, it shows what the lens at the front of the Onsight 2500 is viewing, but it can also provide status information and menus. Depending on the display mode, the Viewfinder uses a status bar, icons, and popup windows to provide information, notifications, and prompts as necessary.

Important: When you are using the Viewfinder screen, always use the stylus provided. Do not use other objects, as this could damage the Viewfinder screen. Tap the screen lightly. Do not press hard or strike the screen.

For further information on the Viewfinder features and display modes, see section 5, Viewfinder, on page 18.

9.3.2   Soft Keys

Some screens contain on-screen keys or buttons, e.g., **Accept** or **Cancel** on a configuration screen. You can select these by tapping them with your stylus, or by pressing Navigation pad keys.

> ℹ *All references to "select" refer to pressing the appropriate Navigation pad key (button) or tapping the screen element/icon with the stylus.*

9.3.3   Icons

Some options or operating conditions cause notification icons to appear on the screen. Many of the icons are touch sensitive – tap the icon with the stylus to view a pop-up message or status screen. Tap the status screen again to dismiss the message.

> *Viewfinder icons provide status information and other notifications.* **Tap the icons with the stylus** *to view a pop-up message or status screen.*

For example, tapping the **Power** icon 🖲 will provide a **Status** screen showing more detailed power and battery status. Tap the **Status** screen again or press the **Display** button 🖵 to dismiss the message.

9.3.4   Standard Onsight 2500 Icons

Icon	Description	Icon	Description
Power			
	Power Status – connected to external power		Battery level is critically low or the battery is defective
	Battery fully charged		Battery low
	Backlight power save		Backlight on
	Standby		
Network			
	Network connected		Network disconnected
	Network error		
Communication			
	Radio link disconnected		Low radio signal strength
General			
	General alert		Process successful (e.g. software update complete)
	Indicates the endpoint has selected encryption mode as their security setting.		
Camera Functions			
	Manual focus mode		Optical Zoom
	Illumination is off		Illumination is on
			Macro Illumination is on (2500 only)

Icon	Description	Icon	Description
Image Control			
	Image captured but not displayed (tap icon to display the last captured image) Referred to as the **Start Image Display** icon.		Image captured but not shared while a call is connected (tap icon to share the last captured image) Referred to as the **Start Image Share** icon.
	Image displayed locally on the Viewfinder (tap icon or press **Capture** button to exit) Referred to as the **Image Displayed** icon.		Image displayed locally on the Viewfinder *and* shared with Onsight Connect (tap icon or press **Capture** button to exit) Referred to as the **Image Shared** icon.
Audio			
	Audio volume increased		Audio volume decreased
	Audio output muted		
	Microphone enabled		Microphone muted
Video			
	Stream initializing		Media stream active
	Media stream is experiencing significant packet loss		Media stream error
	Live video is not paused		The live video stream is paused
	Video streaming is disabled		
Telestration			
	Telestration icon (tap icon to open the Telestration menu)		
Calling			
	Call connected		Call disconnected
	Incoming call invitation		Outgoing call request (waiting for remote side to accept)

Icon	Description	Icon	Description
Call Status			
1	**Telestration Color** – when clicked, brings up a color palette to change the telestration color. Any Onsight endpoint (Onsight Connect or Device) can change the telestration color of any other Onsight endpoint.		**Endpoint Type** – Onsight Connect endpoint.
	Endpoint Type – Onsight 2500 that is able to stream or receive live video, and can share images and recordings.		**Endpoint Type** – Onsight 2500 that is not able to stream or receive live video, but can share images and recordings.
	Media Stream Source – Onsight endpoint (Onsight Connect or Device) can be the **Media Stream Source**. By default, the **Media Stream Source** is the active Onsight 2500 in the conference. If any Onsight endpoint wants to play/stream a recording then that endpoint becomes the **Media Stream Source**.		
Recording			
	Remote endpoint is recording the call (video is shared)		Remote endpoint is recording the call (video not active)
	Record active		Recording disabled (Privacy mode)

9.3.5 Stylus

The stylus is used to select an icon or button, a menu item or keyboard character, or to view a pop-up message or status screen. Simply tap the item with the stylus tip. For information screens or pop-up messages, tap the item again to close it.

Tap the screen lightly. Do not press hard or strike the screen. Do not use other objects, as this could damage the Viewfinder screen

The Onsight 2500's stylus has a screwdriver tip on one end. Do not use the screwdriver tip to make any selections on the viewfinder. The screwdriver tip is used for the I/O Sled, I/O Cover, and Power Sled, or for opening the battery compartment.

9.3.6   On-Screen Keyboard

The on-screen keyboard appears when you select a text field in the Viewfinder. Tap the keys with the stylus to enter text. For additional characters, tap the **Shift** key.

To move the on-screen keyboard to a new location on the screen, touch the stylus to the top edge of the keyboard image and drag it to a new location.

9.3.7   General Conventions

- The "➔" symbol is used to identify to the user a sequence of steps that need to be performed for a specific function.

  i.e. ➔ To set the Standby delay…

- Bold is used to identify a screen name, menu name, screen message, or specific icon name called out in an instruction.

  i.e. The message "**Video resumed**" appears.

- The 🛈 icon identifies to the reader important information to be read.

- The 💡 icon identifies to the reader information that is useful for the function being described.

9.3.8   Terminology and Definitions

- Only one Onsight 2500 can stream *live* video in a conference call. This Onsight 2500 is therefore referred to as the *primary* Onsight 2500. All other Onsight 2500s in the conference call are referred to as *secondary* Onsight 2500s.

- "Expert" refers to the user of the Onsight Connect for Windows software application. Onsight Connect for Windows software is installed on the expert's computer.

- Onsight Connect or an Onsight 2500 is designated as an endpoint.

- "Video" or "Recording" can be used interchangeably depending on context, and can refer to:

  - a video recording which may include video, two-way voice, subject audio, images, and telestration

  - a two-way voice recording only

- "Audio" or "Voice" refers to audio from an operator's voice.

- "Subject Audio" refers to the unprocessed sound coming from the subject captured by the Onsight 2500. Subject Audio is time-synchronized with the video.

- Temporary color change means that the color that was changed will revert back to its previous (default) color after a session (call) has ended. A permanent color change is made by saving the new color as default (i.e. Save As Default).

9.3.9   Tips

- A conference call consists of more than two call participants. The host of the conference call is the Onsight Connect user who establishes the connection with the Onsight 2500.

- For video playback, live video streaming must be off.

- When making a recording, it is possible to record a voice audio-only call.

- You cannot share an image during video playback.

- You can share an image during live streaming.

10 Maintaining the Onsight 2500

Follow these guidelines to ensure the Onsight 2500 remains in good working order:

10.1 General Recommendations

- Limit exposure to dust, rain or moisture.
- Protect the Onsight 2500 from temperature extremes (e.g., do not leave it on an automobile dashboard or on top of a heat source).
- Observe the rated operating and storage environmental specifications.
- The Onsight 2500 is a precision instrument and must be protected from drop and vibration. Always use the provided wrist lanyard or a neck strap to prevent accidental drop.
- Operate the Onsight 2500 in a well ventilated area to prevent overheating. Do not operate the Onsight 2500 in a closed environment where it can overheat (e.g. a sealed plastic bag).
- Always keep the I/O connector protected using the I/O Cover or an I/O Sled (Onsight 2500).

10.2 Inspection/Maintenance/Cleaning

- Inspect the camera and connectors for damage and/or debris/moisture before each use.
- Wipe off any debris/moisture with a clean lint-free cloth and a 50/50 mixture of isopropyl alcohol and distilled water, except for the Display/Touch Screen and interface connectors. Dry off remaining moisture with a fresh lint-free cloth.
- The cleaning requirement for the Display/Touch Screen is in paragraph 10.3 below.
- Do not submerse or pour any liquid onto the product.

10.3 Display/Touch Screen

- LCD displays deteriorate when exposed to ultraviolet rays. Do not leave the Onsight 2500 in direct sunlight or strong ultraviolet rays for extended periods of time.
- If you store the Onsight 2500 above or below the rated storage temperature, it may cause permanent damage to the display.
- Extended contact with water drops or finger grease may cause discoloration or spots.
- Protect the screen from scratches. Use the supplied stylus or plastic-tipped pens designed for use on a touch screen. Never use a sharp object on the touch screen.
- Tap the screen lightly. Do not press hard or strike the screen.
- Clean the screen with a soft cloth moistened with distilled water. Do not use commercial or household cleaners as they may damage the screen.
- Consider using a replaceable screen protector to help protect against scratches.

10.4 Optics

- If you will be using the Onsight 2500 in a dusty or dirty environment, it is recommended that the lens be protected with a screw-on lens filter such as a standard 30mm skylight filter.
- Clean the lens with optical lens cleaning cloth and cleaning solution. Do not use general purpose tissue.

10.5 Ergonomic Recommendations

Important: Follow the recommendations below to minimize risk of ergonomic injury.

- Follow the recommendations of your Health and Safety Officer regarding your company's safety policies and procedures.
- Whenever possible, reduce or eliminate repetitive motion.
- Maintain a natural position while operating the equipment.

11 Onsight 2500R/2500Ex Technical Specifications

SYSTEM ARCHITECTURE

- High performance, multiprocessor architecture optimized for real-time multimedia processing and communications in a handheld form factor
- Microsoft WinCE 5.0
- SIP-based session control
- Windows-based PC Client allowing for easy call initiation and camera control

PHYSICAL CHARACTERISTICS

- Size – 187 (7.36") mm wide x 127 (5.00") mm high incl. antenna, 104 (4.09")mm without antenna x 108 (4.25") mm deep
- Weight – Approx. 900 grams (1.98 pounds) without battery
- Non slip hand grips
- Integrated LED-based illumination ring
- Integrated water resistant door for access to Battery and SD Card
- Rugged form factor resists shock and drop

OPTICAL PERFORMANCE

- CCD image sensor – capable of high precision close-up video
- 10x optical zoom, f=4.2 mm (wide) to 42 mm (tele), F1.8 to F2.9
- 10 mm minimum working distance (wide end)
- 1000 mm minimum working distance (tele end)
- 1.5 lx (50 IRE) minimum illumination
- Automatic/manual white balance
- Manual or automatic focus

VIDEO STANDARD

- H.264
- H.263
- Up to 2.5 Mbps
- User selectable resolutions and frame rates up to:
    - D1 (720 x 480) at 30 fps

USER INTERFACE & FEATURES

- VGA (640 x 480) display/viewfinder
- Integrated touch screen

- User-friendly graphical user interface
- Dedicated call send and end buttons
    - Simple end-user experience much like a cellular telephone
- Still image capture button
- Stream button
    - Video stream can be started and stopped by pushing one button
- Context sensitive cursor pad buttons (includes volume controls, microphone mute, and illumination control)
- Media record to SD card
- Manual focus button
- OSD (On Screen Display) button for easy access to status and other information
- Integrated contacts directory
- End user selectable streaming parameters
- LED indicators for power, stream/record, power/charging, and network link

COLLABORATION FEATURES

- Form factor and software optimized to allow real time voice and video collaboration related to subject matter being captured by the Onsight 2500
- Telestration:
    - Allows both the Onsight 2500 operator and Onsight Connect operator to draw on top of the video or frozen image
    - Both "ends" of the conversation see the drawing simultaneously
- Remote control of major Onsight 2500 features – zoom, focus, still image capture, illumination, and stream parameters

AUDIO FEATURES

- Omni-directional microphone for VoIP support
- Microphone or line-in input for capture of subject audio time synchronized with the subject video
- Headset connector for high noise environments
- Bluetooth Headset
- Speakerphone with acoustic echo cancellation

- Silence suppression of VoIP communications to minimize network bandwidth utilization
- Dynamic jitter buffer adjusts to changing network conditions to balance low latency with a low voice dropout rate

AUDIO STANDARDS

- VoIP: G.711, GSM 6.10
- Subject Audio: G.711, GSM 6.10

SECURITY

- User ID and password control
- WLAN Network Authentication modes:
    - WPA/WPA2 – Enterprise
    - WPA/WPA2 – PSK
    - Open
    - Shared
- WLAN Data Encryption modes:
    - WEP
    - TKIP
    - Disabled
    - AES
- 802.1X Authentication
    - EAP-TLS
    - PEAP
    - PEAP-GTC
- Media Encryption
    - AES-128

EXTERNAL INTERFACES

- SD/SDHC Memory Card (SD Class 10 or higher)
    - Minimum write speed: 9.0 MB/sec
    - Minimum read speed: 10.0 MB/sec
- Headset
    - Mono 32 ohm speaker
    - 3.5mm audio jack (3 conductor, tip microphone, ring speaker)
- Bluetooth Headset
- Removable Input/Output Sled
- External power input
- RJ-45 10/100 Mbps Ethernet
- USB Host 2.0
- Audio Line-in
    - 1 Vrms input
    - 2.5 mm audio jack, 2 conductor, tip line-in
- S-Video
    - Configurable for Input or Output

COMMUNICATIONS

- IP calls – SIP call control
- Integrated 802.11 a/b/g/n radio
- 10/100 Mbps Ethernet (via removable Input/Output Sled)

POWER

- Rechargeable 2400 mAH Li-Ion battery pack
- External power
  - Input: 12 VDC @ 1A
  - External Power Adapter Specifications:
    - Output Voltage: 12 VDC @ 1.5A
    - Rated Input Voltage: 100 – 240 VAC
    - Input Voltage Range: 90 – 264 VAC
    - Rated Input Frequency: 50 – 60 Hz
    - Input Frequency Range: 47 – 63 Hz

OPERATING ENVIRONMENT

- Temperature:
  - Operating: -10° to 40° C
  - Storage: –20° to 60° C
- Humidity (non-condensing):
  - Operating: 5 – 95%
  - Storage: 5 – 85%
- N.B. Long term storage over 3 months is 0°C to 40°C at 60% R.H. or less

EXPLOSION PROTECTION

- Explosion protected versions available (Onsight 2500Ex). Consult the Onsight 2500 Regulatory and Safety Guide and the product label for specific ratings.

12 Service Information

If you encounter difficulties with the Onsight 2500, contact your corporate technical support department. They will determine whether the problem exists within the network infrastructure or the Onsight equipment and will contact Librestream Support. See page 62 for Librestream contact information.

13 Regulatory and Safety Information

The Onsight 2500 Regulatory and Safety Guides contain detailed safety information.

Before operating the Onsight 2500, you must read the Onsight 2500 Regulatory and Safety Guide.

14 Librestream Limited Warranty Agreement

Hardware: Librestream warrants to the original purchaser (Buyer) that the hardware Product will be free of defects in workmanship and materials for a period of twelve (12) months from the date of shipment from Librestream or its designated manufacturer, unless otherwise provided by Librestream in writing, provided the Product remains unmodified and is operated under normal and proper conditions. The warranty does not extend to persons other than the Buyer who purchased the product in unused condition from Librestream. Warranty provisions and durations on remanufactured products, and reconditioned or upgraded products, shall be as provided in the particular Product documentation in effect at the time of purchase.

Products may be serviced with parts, components, or subassemblies that originate from returned products and that have been determined to meet applicable specifications for equivalent new material and Products.

The sole obligation of Librestream for defective hardware Products is limited to repair or replacement (at Librestream's option) on a "return to service depot" basis with prior Librestream authorization. Buyer is responsible for shipment to Librestream and assumes all costs and risks associated with this transportation; return shipment to Buyer will be at Librestream's expense. The Product must be returned either in its original packaging or in a similar package affording an equal degree of protection.

Buyer shall be responsible for return shipment charges for Product returned where Librestream determines there is no defect ("No Defect Found"), or for Product returned that Librestream determines is not eligible for warranty repair. If after investigation Librestream determines that the reported defect was not covered by warranty, Buyer shall be liable to pay Librestream, at Librestream's sole discretion, for the cost of investigating the problem at Librestream's then prevailing per incident billable rate. No charge will be made to Buyer for replacement parts for warranty repairs. Librestream is not responsible for any damage to or loss of data or removable data storage media, or the restoration or reinstallation of any software programs or data other than the software, if any, installed by Librestream during manufacture of the Product.

The above warranty provisions shall not apply to any Product (i) which has been repaired, tampered with, altered or modified, except by Librestream; (ii) in which the defects or damage to the Product result from normal wear and tear, misuse, negligence, improper storage, water or other liquids, battery leakage, use of parts or accessories not approved or supplied by Librestream, or failure to perform operator handling and scheduled maintenance instructions supplied by Librestream; (iii) which has been subjected to unusual physical or electrical stress, abuse, or accident, or forces or exposure beyond normal use within the specified operational and environmental parameters set forth in the applicable Product specification; or (iv) used with any software, hardware or third party equipment not approved by Librestream, nor shall the above warranty provisions apply to any expendable or consumable items, such as batteries, supplied with the Product.

Software: Any Librestream software enclosed or embedded in the hardware Product is warranted in accordance with, and is otherwise subject to, the provisions of the Librestream End User License Agreement that is applicable to that Librestream software.

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15 End User License Agreement

This product's software is licensed under the terms of an End User License Agreement (EULA), the latest version of which can be found at:

http://www.librestream.com/products/termsofuse.html

16 Librestream Contact Information

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