

KVH Watch® Terminal

Quick Reference Guide for Onboard Users



Technical Support

If you need any assistance with the terminal, please contact KVH Technical Support at mvbsupport@kvh.com or +1 401 851-3806.

The KVH Watch Terminal installed on your vessel provides **Flow** and **Cloud Connect** subscribers on shore with secure machine-to-cloud connectivity, allowing them to remotely monitor IoT data from onboard equipment to ensure it is running smoothly and catch irregularities before they become problems. It also offers **Remote Expert Intervention** subscribers the ability to provide video-enabled remote support to your crew whether your vessel is in port or at sea.

The Watch Terminal uses a dedicated VSAT antenna with its own dedicated LAN (local area network) that is fully isolated from your vessel's existing IT and OT networks. The Watch antenna above deck is controlled and powered by the Antenna Control Unit (ACU) belowdecks. The managed Ethernet switch provides a secure, isolated network connection to each subscriber's onboard system, as well as to the dedicated Wi-Fi access points (APs) installed for the exclusive use of Remote Expert Interventions (*if subscribed*).

Figure 1: Watch System Diagram (Example)

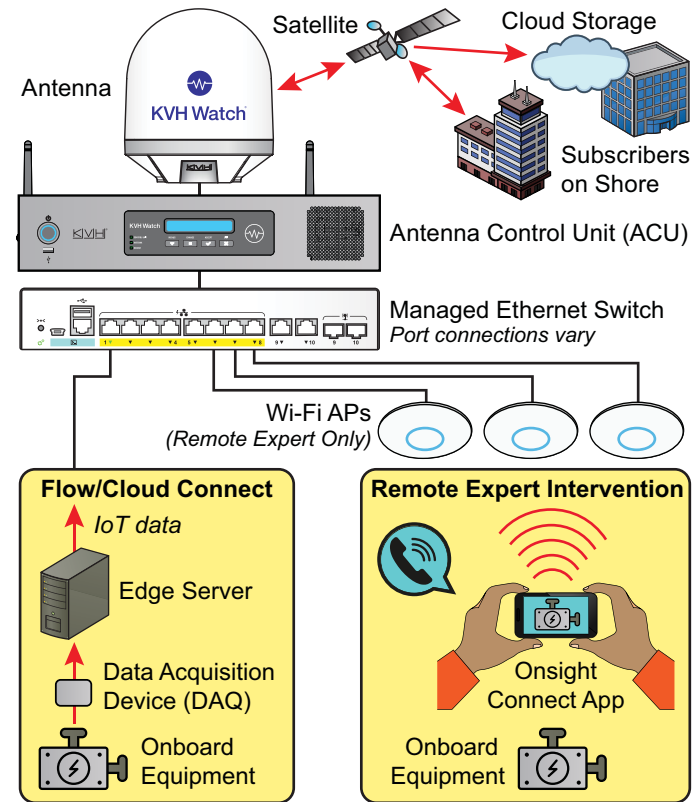
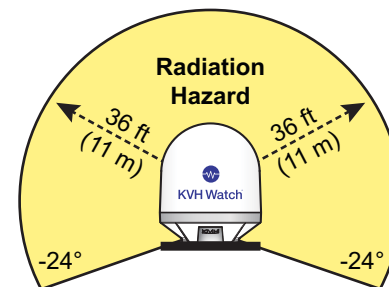


Figure 2: Radiation Hazard



CAUTION

RF Radiation Hazard

The Watch antenna transmits radio frequency (RF) energy that is potentially harmful. Whenever the terminal is powered on, make sure everyone stays more than 36 feet (11 m) away from the antenna (see Figure 2). No hazard exists directly below the antenna.

Remote Expert Wi-Fi (*if installed*)

NOTE: Device MAC address authorization required – see [page 3](#).

Network Name (SSID):

Password:

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Turning On the Watch Terminal

Press the power button on the ACU then wait five minutes for system startup (see Figure 3). When the ACU front panel indicates "Online," the terminal is connected to the satellite and ready for use.

NOTE: Except in times of maintenance or emergency, the terminal should be kept powered on so as not to interrupt an important IoT data feed.

Avoiding Blockage

The antenna requires a clear view of the sky to transmit and receive satellite signals. Common causes of blockage include other onboard masts or structures, severe weather, and nearby buildings, bridges, trees, or other vessels (see Figure 4).

Avoiding blockage is crucial for a successful Remote Expert Intervention.

Intervention Approvals

Ship's Captain Only

All Flow Interventions and Remote Expert Interventions must be approved by the ship's captain. Whenever a subscriber schedules an Intervention at KVH Watch Manager, an email is sent to the captain to request approval. He/she simply clicks the link in the email to view the Intervention details and approve or decline the request (see Figure 5).

*NOTE: A **Flow Intervention** temporarily boosts the subscriber's data speeds via the Watch antenna to support large file transfers, like a software update or diagnostics log. A **Remote Expert Intervention** uses the fastest available speeds for a remote support session, permitting experts on shore to guide onboard personnel through maintenance or repair procedures. Interventions will not consume any data over the vessel's general purpose satellite communications system. All data is transferred over the Watch Terminal.*

Important!

The remainder of this guide only applies if your Watch Terminal includes Wi-Fi access points supporting Remote Expert Intervention users.

Figure 3: Turning On the Watch Terminal at the ACU

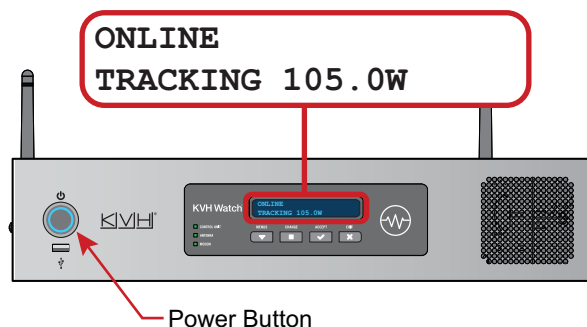


Figure 4: Blockage Example

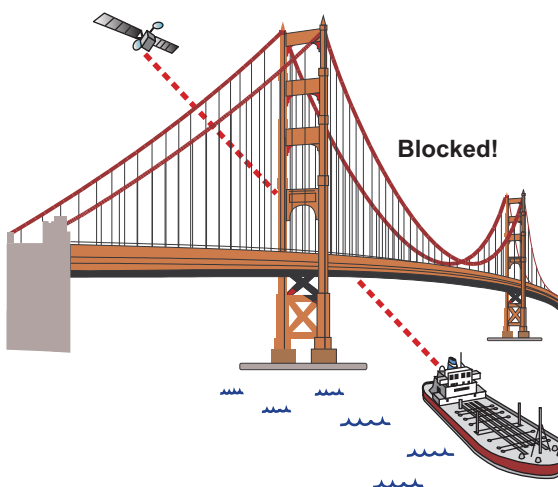


Figure 5: Intervention Approval

≡ KVH Watch Manager

Do you approve this requested Watch Intervention?

TASK	Diagnostics Log Files
FROM	mnelson@kvh.com
TO	captain.kvhwatch@gmail.com
START (UTC)	31 Aug 2020, Mon, 09:00
DURATION	1 hour
STATUS	REQUESTED
DESCRIPTION	Download complete historical diagnostics log

Comment

ApproveDecline

Authorizing Remote Expert Users and Devices

To ensure only authorized users and devices access the Remote Expert Wi-Fi network during Interventions, provide the following to KVH to set up your user licenses and authorized devices:

- Names and email addresses of all potential Intervention participants on your vessel
- Wi-Fi MAC addresses of all devices onboard that you want to provide access (only those devices will be able to connect to the Remote Expert network via the Wi-Fi access points); see Figure 6

Send your list of users and devices to KVH Account & Subscription Support at airtimeservices@kvh.com. Once KVH sets them up, users will receive a welcome email with links to download the Librestream Onsite Connect app, along with their login credentials.

Using the Device MAC Address

If your authorized device is an Android or Apple® smartphone or tablet, it might be configured by default to use a private/randomized MAC address when connecting to a network. This setting for the Remote Expert Wi-Fi network must be changed to use the device’s MAC address. Follow the basic steps in Figure 7 or refer to your device’s user documentation.

Figure 6: Finding Your Wi-Fi MAC Address

Device	How to find Wi-Fi MAC address
Android™	Go to Settings > About Phone/Tablet > Status then scroll to “Wi-Fi MAC Address”
iPhone® or iPad®	Go to Settings > General > About then scroll to “Wi-Fi Address”
Windows®	Go to Settings > Network & Internet > View your network properties then scroll to “Wi-Fi” and “Physical Address (MAC)”

Figure 7: Selecting the Device MAC Address on Wi-Fi Network

Device	How to select the MAC address
Android	1. Go to Settings > Network & Internet/Connections > Wi-Fi. 2. Tap the gear icon next to the “KVHWatch” Wi-Fi network. 3. Go to Advanced > Privacy and select “Use device MAC.” – OR – 1. Go to Settings > Connections > Wi-Fi. 2. Touch and hold the “KVHWatch” Wi-Fi network. 3. Go to Manage Network Settings > Advanced and set MAC address type to “Phone MAC.”
iPhone or iPad	1. Go to Settings > Wi-Fi. 2. Tap the Info (i) button next to the “KVHWatch” Wi-Fi network. 3. Using the slider, deselect “Private Address.”

Installing the Onsight Connect App

To participate in a Remote Expert Intervention, an authorized crew member needs to use an authorized device (see [page 3](#)), and that device must have the Onsight Connect app installed. See [Figure 9](#) for compatibility.

Installing the App on a Mobile Device

You can install the app on an Android or Apple smartphone or tablet. Click the link provided in the welcome email to download the free app from the Google Play™ Store or Apple App Store® (*data charges may apply*). You can also find the app in the store by searching for “Librestream Onsight Connect.”

Installing the App on a Windows PC

Click the link provided in the welcome email to download the Windows app. Then run the **OnsightLauncher.exe** file to install the app on the computer.

NOTE: In most cases, onboard personnel use the mobile app, while experts on shore use the Windows app. Therefore, this guide assumes you are using the mobile app.

Figure 8: Onsight Connect App Download Options

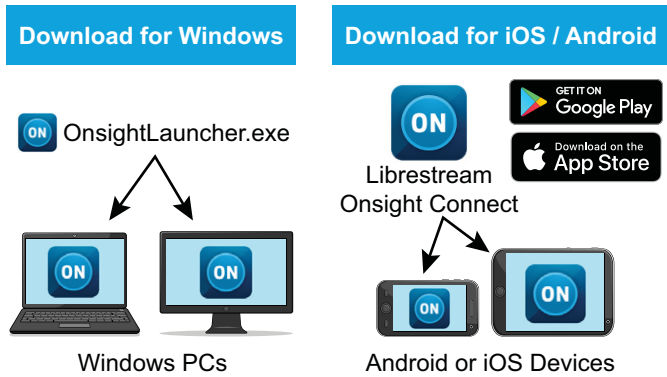


Figure 9: Onsight Connect App System Requirements

Device	Requirements
Smartphone or tablet	Android 4.4+ or iOS® 10+
Windows PC	• Windows 10, 8, 8.1, or 7 • Up to 120 MB disk space • Wired 10/100 Ethernet port for network connection • Minimum OpenGL v1.X video card (or DirectX 9.0c compatible if V6.7 or lower) • Microphone and speakers, headset, and/or external speakerphone • 2 GHz processor speed • 2 GB memory

Joining an Intervention

The designated user will receive an email invitation to the Remote Expert Intervention. At the specified date and time, follow these steps to participate:

1. Make sure the Watch Terminal is online.
2. Make sure your authorized mobile device is fully charged. Streaming live video consumes a lot of battery power.
3. Go to a location onboard within range of one of the Watch terminal's Wi-Fi access points.

NOTE: Wi-Fi range depends on the layout and structure of the vessel – wireless signals cannot pass through bulkheads and can be uneven near metal masses. Therefore, the closer you are to the Wi-Fi access point, the better the performance.

4. Connect your authorized mobile device to the "KVHWatch-<vessel name>" Wi-Fi network.
5. Enter the Wi-Fi password provided to you by the installer. (See page 1 of this guide. If the password is missing, contact KVH Technical Support at mobsupport@kvh.com.)
6. Launch the Onsite Connect app and enter your username and password. (If you have not received your login credentials, contact KVH Account & Subscription Support at airtimeservices@kvh.com.)
7. Make sure the System Health button is green (see Figure 10). If it's red, tap the button to view status details.
8. Accept an incoming call from the onshore expert (see Figure 11). Or initiate the call by tapping a user's name under Contacts or Call History (see Figure 12 and Figure 13).

To add a new contact, tap the "+" button then enter the name and SIP address and tap **OK** (see Figure 14). Be sure to enter the SIP address in the first "Address" field and leave "Address2" blank.

NOTE: The SIP address is derived from the user's email: <username>@kvh.sip.sys.librestream.com.

Figure 10: Onsite Connect Login

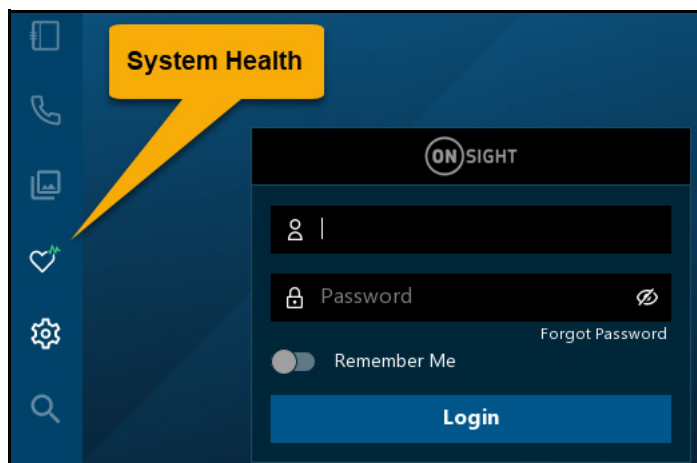


Figure 11: Incoming Call Prompt

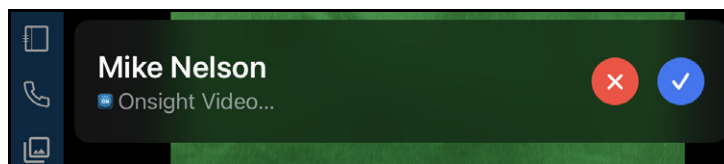


Figure 12: Making a Call from Contacts

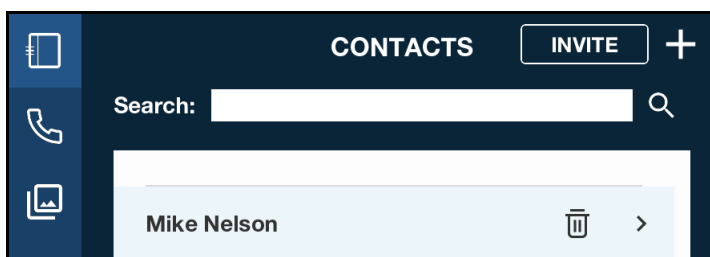


Figure 13: Returning a Call from Call History

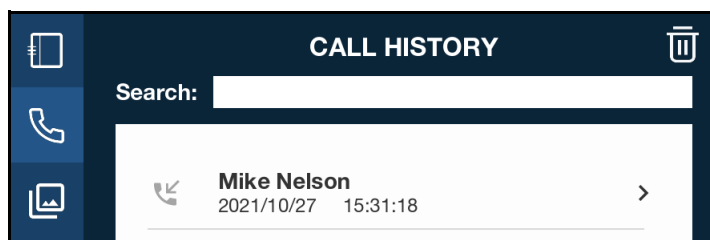
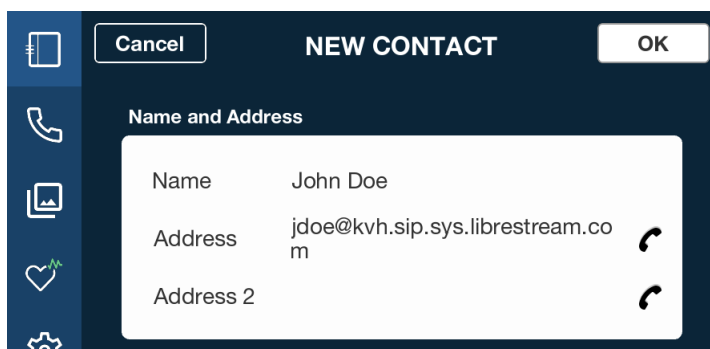


Figure 14: Creating a New Contact



Using the Onsight Connect App Tools

While you are speaking with the expert on shore, you can capture, share, and annotate video and photos. This section highlights the most common functions you might use. Refer to [Figure 15 on page 7](#) to locate the buttons on screen.

Share Live Video

To start streaming your video, tap the ON button. The ON button turns blue. To stop sharing, tap the ON button again.

To pause the video, tap the Pause button. Tap it again to resume streaming. To mute your microphone, tap the Mute Mic button. To mute another audio source, tap the Audio button then select which source to mute.

Record a Video

Tap the Record button to start recording your video. The recording will include live video, audio, onscreen drawings, and shared images. A red recording indicator appears in the upper-right corner. Tap the Record button again to stop recording.

Take a Photo

Tap the camera button to take a photo. The photo is saved as a JPG image under My Files. A pop-up will then ask if you would like to share the photo with others on the call. *See Share a Saved Photo or Video.*

To set the camera's flash settings, tap the Illumination button. To zoom in or out, tap the Zoom button.

NOTE: If the app has been online within the past 30 days, you do not need to be on a call to record a video or take a photo with the app. You can capture them before an Intervention starts to save time. After 30 days offline, your user authentication in the app expires until you use it online again. In that case, an alternative is to take photos using your device's camera. You just won't be able to record videos to share.

Share a Saved Photo or Video

Tap the Files button to access your saved photos or videos. All photos and videos taken using the app are available under the My Files tab. Select Gallery or Camera Roll to access any other photos (not videos) stored on your device. To share any of these files during a call, simply select the desired photo or video then tap the ON button. A blue border around the photo indicates the photo is being broadcast to those on the call. To stop sharing, tap the ON button again.

Draw on Screen

Tap the pencil button to access the telestration tools. Select a color and a drawing tool (like a circle or an arrow) then use your finger to draw it on the screen. You can draw on an image or on a live or recorded video – whatever you are currently viewing on screen. You can also add a text box. All markups to a photo are saved with the photo upon exiting.

NOTE: Be sure to pause the video before drawing on it.

Getting Help

For more information about the app, tap the "?" button to show the tool tips over the buttons. Then tap a tool tip for details. The app also includes a comprehensive User Manual – tap the "i" button to view it.

For additional information, refer to Librestream's comprehensive Onsight support web page at <https://librestream.com/onsight-support>.

Ending the Call/Logging Out

To end the call, tap the red End Call button in the upper-right corner of the screen. If you will not make any further calls during the Intervention, tap the Logout button in the lower-left corner of the screen to log out of the app. Then close the app.

NOTE: Ending the call does not end the scheduled Remote Expert Intervention. The subscriber can stop the Intervention at the KVH Watch Manager.

Figure 15: Onsight Connect App Interface

