TracPhone® LTE-1 Global
Installation Guide

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This guide explains how to install the TracPhone LTE-1 Global antenna system on a vessel. Operation instructions are provided in the Quick Start Guide.

Installation Steps

Appendices

Who Should Install the System?

To ensure a safe and effective installation, KVH recommends that a KVH-authorized marine technician install the TracPhone antenna. KVH-authorized technicians have the tools and electronics expertise necessary to install the system. To find a technician near you, visit www.kvh.com/wheretogetservice.

Activating the System

For your convenience, the system can be activated remotely in advance using the information on the QR code label located on the Quick Start Guide. By using the QR code, the antenna serial number will automatically be populated in the online activation form. Alternatively, you can go to www.kvh.com/lteglobalactivate and enter the serial number printed on the label.

Technical Support

Phone: +1 401.847.3327
Email: support@kvh.com
Hours: 24/7/365

Important Safety Information

⚠️ This icon indicates a danger, warning, or caution notice. Be sure to read these carefully to avoid injury.

⚠️ **WARNING**

Risk of Electric Shock

To avoid electric shock, do not open the Power-over-Ethernet (PoE) injector enclosure or any component inside the antenna dome. There are no user-serviceable parts inside.

⚠️ **WARNING**

Risk of Electric Shock

If any component of the TracPhone LTE-1 system becomes damaged and/or no longer functions normally, disconnect it from vessel power, secure it from unintended operation, and contact KVH Technical Support (see "Technical Support" on page 1). All repairs or modifications must be performed by a trained, KVH-certified technician. If you are a KVH-certified technician, you still must contact KVH Technical Support prior to conducting any repairs or modifications to the equipment.

⚠️ **WARNING**

Risk of Explosion

Do not operate the PoE injector (or any other electrical device) in an environment where flammable gases, vapors, or dusts are present. In addition, do not operate the PoE injector in an environment with a temperature outside its 5° F to 131° F (-15° C to 55° C) temperature range.

⚠️ **WARNING**

Risk of Electric Shock

Failure to ground the TracPhone LTE-1 system properly to ship's ground will cause an unsafe floating ground condition, risking potentially lethal electric shock. See "Wire the PoE Injector" on page 10 for details on the proper grounding of the equipment.

⚠️ **CAUTION**

RF Radiation Hazard

The antenna transmits up to 0.5 watts of radio frequency (RF) energy that is potentially harmful. Whenever the system is powered on, make sure everyone stays more than 10 inches (25 cm) away from the antenna. Additionally, the antenna must not be co-located or operate in conjunction with any other antennas or transmitters except in accordance with FCC multi-transmitter procedures.

① Inspect Parts and Get Tools

Before you begin, follow these steps to ensure you have everything needed to complete the installation.

> **IMPORTANT!**
>
> Always lift the antenna by the baseplate and never by the radome or any portion of the internal antenna assembly (see Figure 1).

a. Unpack the box and ensure it contains everything shown on the Kitpack Contents List. Save the packaging for future use.

b. Carefully examine all of the supplied parts to ensure nothing was damaged in shipment.

c. Gather the tools and materials listed below. You will need these items to complete the installation.

- Flat-head and Phillips screwdrivers

- Electric drill with 1/8" (3 mm) and 1/4" (6 mm) bits

- Hole saw of desired diameter (for cable access hole, see Figure 5 on page 5)

- Socket wrenches

- Light hammer and center punch

- Adhesive tape, and scriber or pencil

- Silicone sealant or equivalent

- Multimeter

- Wi-Fi-enabled mobile device, such as a laptop PC, or Apple® iOS or Android™ smartphone/tablet

Figure 1: TracPhone LTE-1 System Components

Antenna
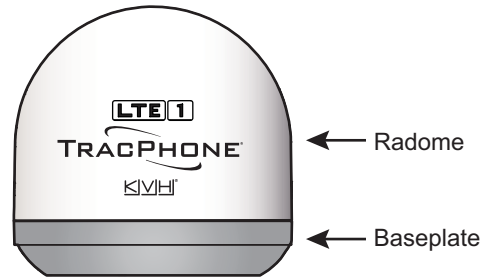
Power-over-Ethernet (POE) Injector
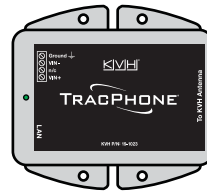
2 Plan the Antenna Installation

Before you begin, consider the following antenna installation guidelines.

> **IMPORTANT!**
>
> Be sure to follow the guidelines below. Damage caused by an improper installation is not covered under KVH warranty.

- Minimize blockage. Optimal performance requires a 360º clear view of the horizon at the highest possible vantage point to receive cellular signals. The fewer obstructions, the better the system will perform (see Figure 2).

- Consider the distance between your antenna and any radar. Most radar transmitters emit RF energy within an elevation range of -15º to +15º (see Figure 3). Therefore, mount the antenna outside of this elevation range and at least 3 ft (1 m) away from the radar.

> **IMPORTANT!**
>
> Never place the antenna in the beam path of the radar, regardless of distance. The radar's energy may damage the antenna or impair its performance.

- Make sure the mounting surface is wide enough to accommodate the antenna's base (see Figure 4). Also make sure it is flat, level, strong enough to support the antenna's weight, and rigid enough to prevent antenna vibration.

- Be sure to mount the antenna near enough to the PoE injector belowdecks to allow you to connect the KVH-supplied 50 ft. (15 m) CAT-6 Ethernet cable between them, while still maintaining slack in the cable for a sufficient service loop (see).

NOTE: If you need to use a longer cable, optional 75 ft (22 m) (part no. 32-1332-0075) and 100 ft (30 m) (part no. 32-1332-0100) Ethernet cables are available from KVH.

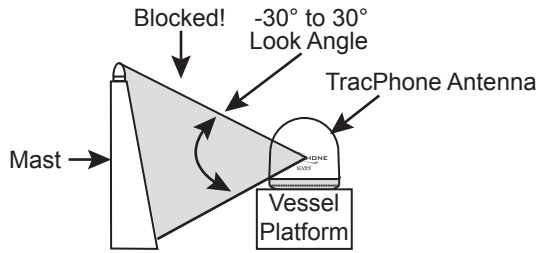Figure 2: Blockage from Obstruction
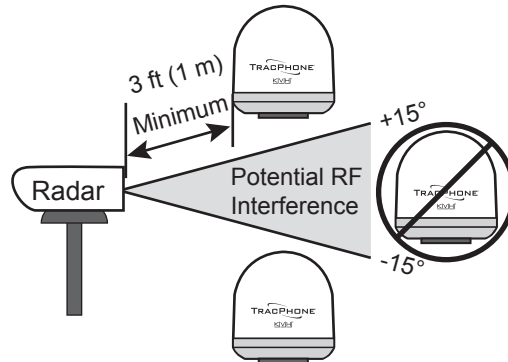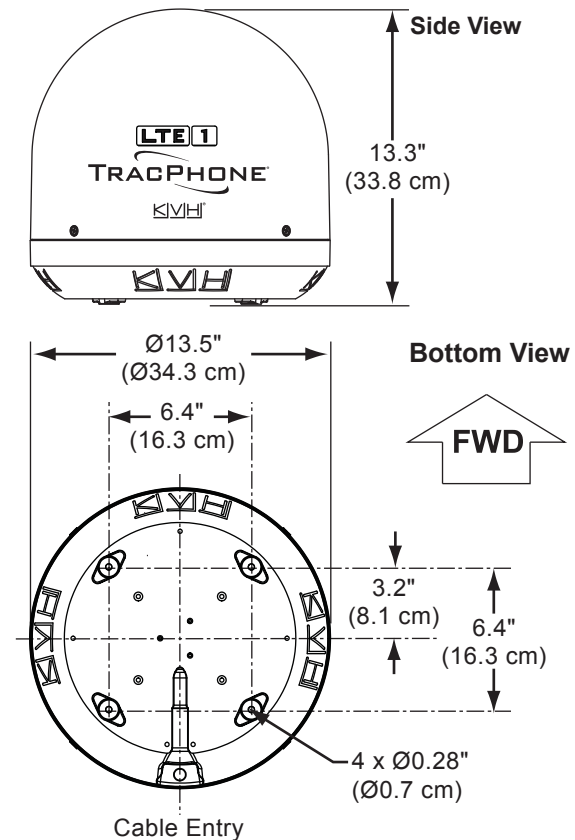

Figure 3: Distance from Radar

Figure 4: Antenna Dimensions

③ Prepare the Antenna Site

Once you have identified a suitable antenna mounting site, according to the guidelines provided on page 4, follow these steps to prepare the mounting site for installation.

a. Unfold the antenna mounting template (supplied in the subscriber Welcome Kit) and place it onto the mounting surface. Make sure the "FWD" (forward) arrow points toward the bow and is **parallel** to the vessel's centerline (see Figure 5). Tape in place.

b. Using a light hammer and center punch, mark the locations for the four mounting holes and cable access hole on the mounting surface in the locations indicated on the template.

c. Drill a 1/4" (6 mm) hole at the four mounting hole locations you marked in Step b. Later, you will insert four #10-32 screws through these holes to secure the antenna to the mounting surface.

d. Using a hole saw, drill the cable access hole in the location you marked in Step b. Be sure to size the hole appropriately to maintain a cable bend radius of at least 2.6" (6.6 cm). If the hole location is in the center of the antenna mounting hole pattern, the diameter of the cable access hole must not exceed 3.5" (89 mm).

e. Smooth the edges of the cable access hole to protect the cable. Later, you will route the antenna's Ethernet cable through this hole and into the vessel.

f. Clean and dry the antenna mounting surface.

g. Peel off the paper backing from the supplied foam seal to expose the adhesive. Then press the foam seal down firmly onto the mounting surface, ensuring the hole in the foam seal aligns with the cable access hole in the mounting surface (see Figure 6).
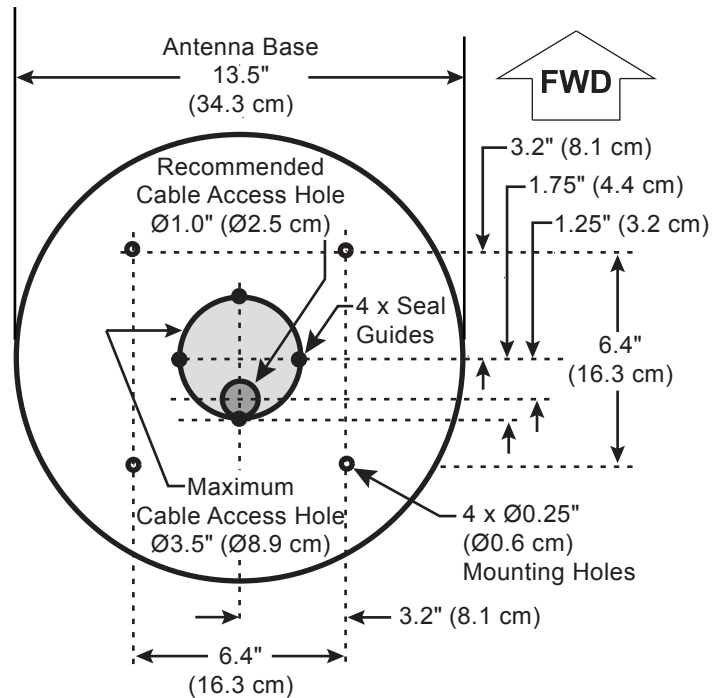
Figure 5: Antenna Mounting Holes Layout

Figure 6: Foam Seal

4 Prepare the Antenna

Follow these steps to prepare the TracPhone LTE-1 antenna for installation.

a. Attach the four rubber mounting feet (*supplied in kit*) to the bottom of the antenna at the locations shown in Figure 7.

> **IMPORTANT!**
>
> Be sure to install the rubber feet. They are required to isolate the antenna from vibration.

NOTE: If the optional mounting bracket was purchased with the system (KVH part no. 72-0409), install it first according to its installation instructions.

b. Remove the four #8-32 screws securing the radome to the antenna (see Figure 8).

c. Carefully lift the radome straight up until clear of the antenna assembly and set it aside in a safe place.

> **IMPORTANT!**
>
> If you keep the radome topside, secure it with a lanyard to prevent it from falling overboard. Also, do not place the radome on a hot steel deck – the heat may warp the radome.

d. Note the antenna serial number, factory default SSID and password for the built-in Wi-Fi provided on the label inside the antenna dome (see Figure 9).

> **IMPORTANT!**
>
> The QR code on the label is provided as a backup to the label located on the Quick Start Guide and is intended for **subscriber use only** for activation.

Figure 7: Attaching the Rubber Feet
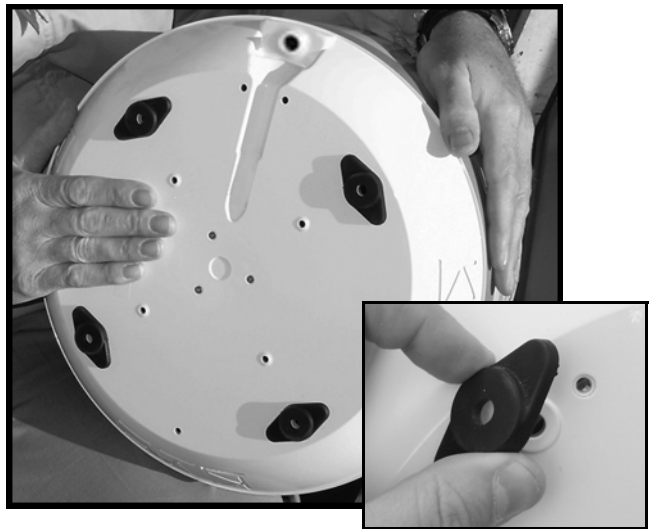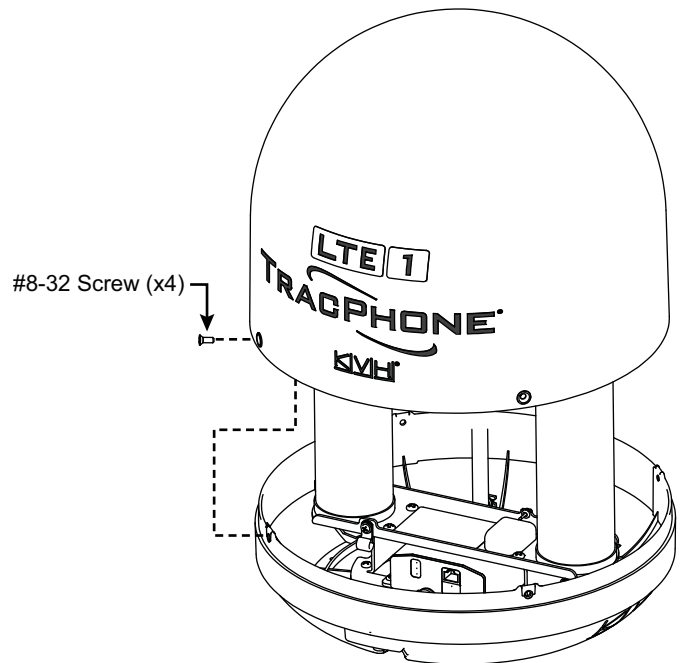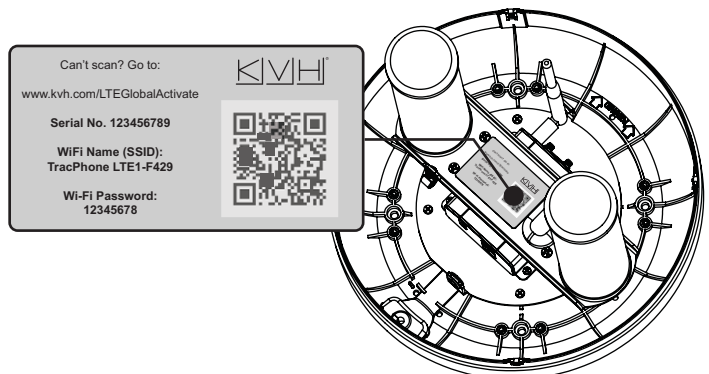
Figure 8: Removing the Radome

#8-32 Screw (x4)

Figure 9: Location of the Serial Number and QR Code

Can't scan? Go to:
www.kvh.com/LTEGlobalActivate

Serial No. 123456789

WiFi Name (SSID):
TracPhone LTE1-F429

Wi-Fi Password:
12345678

e. Remove but do not discard the push-in grommet from the cable entry hole in the baseplate.

f. Feed the CAT-6 Ethernet cable (*supplied in kit*) through the cable entry hole. Then, leaving 1.5 ft (46 cm) of cable for an adequate service loop, and maintaining at least a 2.6" (6.6 cm) bend radius, route the cable as shown in Figure 10.

g. Slide the Ethernet cable through the split in the snap-in grommet inside the baseplate (see Figure 11). Then secure the cable by rotating the grommet until the split is facing down.

h. Connect the Ethernet cable to the Wi-Fi modem's "LAN/WAN" port (see Figure 10).

i. Secure the service loop to the antenna mounting plate with the preinstalled #10-32 screw and P-clip (see Figure 11). Then tighten the screw and P-clip to 31 in-lbs of torque.

j. Attach the push-in grommet that you removed in Step e to the cable near the cable entry hole. Then reinstall the grommet in the cable entry hole.

k. Route the other end of the cable along the cable channel underneath the baseplate and belowdecks through the cable access hole. Always maintain at least a 2.6" (6.6 cm) bend radius.

l. Weatherproof and seal the cable access hole as required.
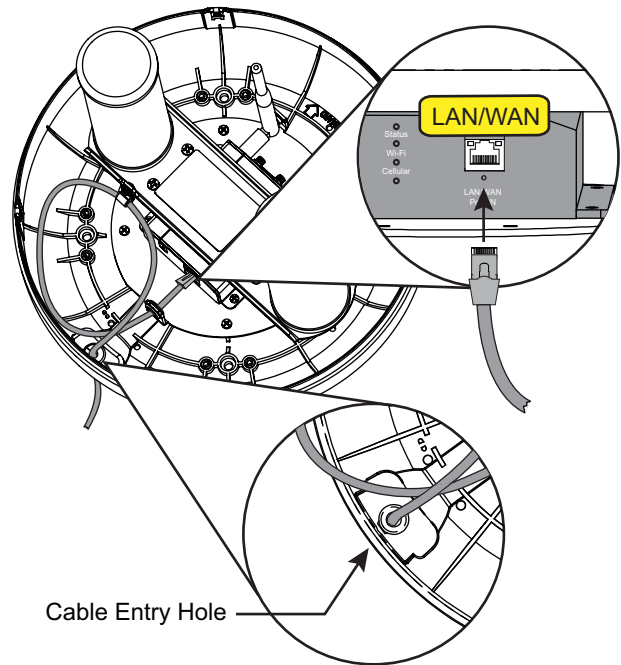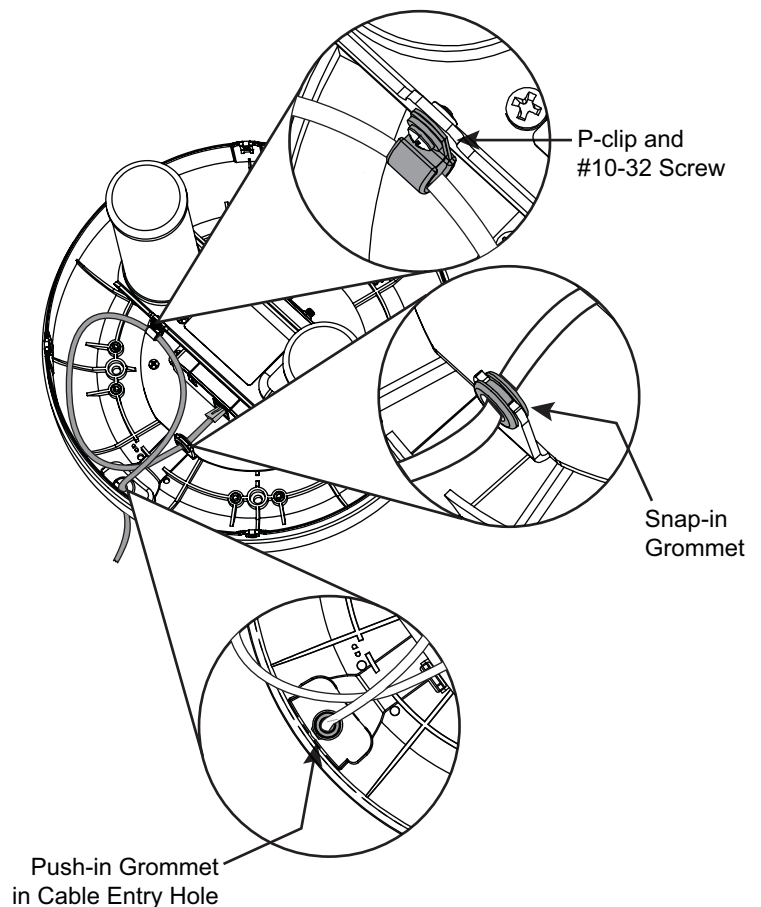
Figure 10: Connecting the Ethernet Cable

Cable Entry Hole

Figure 11: Securing the Ethernet Cable

P-clip and #10-32 Screw

Snap-in Grommet

Push-in Grommet in Cable Entry Hole

5 Mount the Antenna

Follow these steps to mount the antenna to the mounting surface.

a. Place the antenna baseplate over the holes drilled in the mounting surface. Ensure the "Forward" arrow inside the baseplate points toward the bow and is **parallel** to the vessel's centerline (see Figure 12).

IMPORTANT!

Be sure to insert the mounting bolts from above and use the supplied hardware for a secure installation.

---

b. Apply a thin layer of the supplied anti-seize lubricant to the threads of the four #10-32 Phillips screws.

⚠ **CAUTION**

Be sure to observe the safe handling instructions in the Material Safety Data Sheet (MSDS) provided with the anti-seize lubricant.

---

c. At each of the four baseplate mounting holes, place a 7/16"-diameter flat washer on a #10-32 Phillips screw and insert the screw into the hole from above (see Figure 13).

d. Secure each mounting bolt to the mounting surface using a 3/4 "-diameter flat washer and a #10 lock nut from below. Using hand tools, tighten all four screws until the four rubber feet on the baseplate are bottomed against the mounting surface and the foam seal is fully compressed.

IMPORTANT!

Use only manual hand tools to tighten the mounting screws. The torque from a power tool might distort the antenna baseplate.

---

e. Reinstall the radome onto the antenna. The radome's "LTE-1 TracPhone" labels should face fore and aft. Secure in place with the four #8-32 screws you removed earlier. Hide and protect the screws with the plastic screw caps (*supplied in kit*).
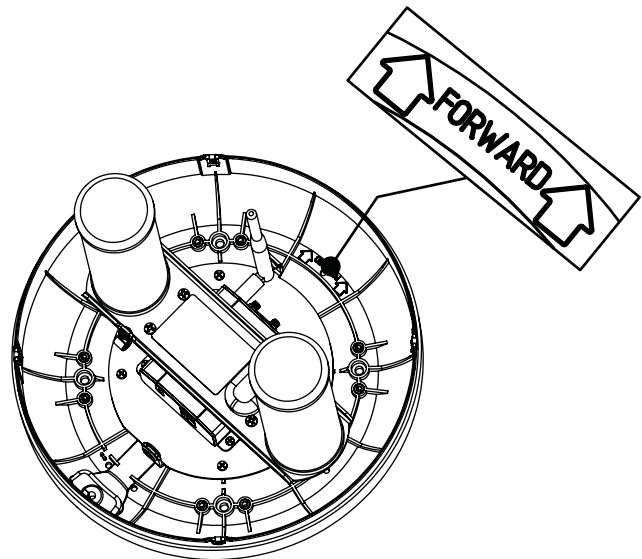
Figure 12: Forward Arrow (Example)
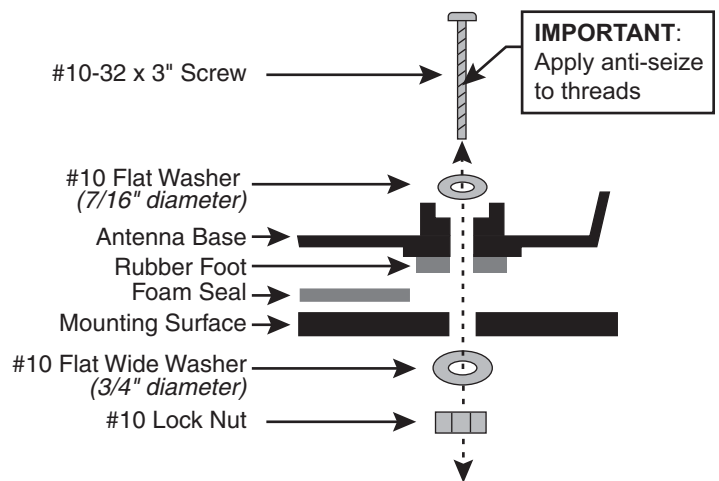

Figure 13: Mounting Hardware

#10-32 x 3" Screw

IMPORTANT: Apply anti-seize to threads

#10 Flat Washer *(7/16" diameter)*
Antenna Base
Rubber Foot
Foam Seal
Mounting Surface
#10 Flat Wide Washer *(3/4" diameter)*
#10 Lock Nut

⑥ Mount the PoE Injector

Follow these steps to mount the PoE injector in a suitable location.

Select a Location

Consider these installation guidelines.

- Select a cool, dry, well-ventilated area belowdecks away from any heat sources or salt spray.

- Be sure the PoE injector's power LED light will be visible to the user.

- Select a location that will provide adequate clearance for the PoE injector dimensions (see Figure 14) and leave plenty of room to accommodate adequate service loops and strain-relief.

Mount the PoE Injector

Follow these steps to install the PoE injector.

a. Using the PoE injector itself as a guide, mark the locations of each of the four mounting holes (see Figure 14).

b. Drill a 1/8" (0.3 cm) hole at the four mounting hole locations you marked in Step **a**.

c. Secure the PoE injector using fasteners that are appropriate for the mounting surface's construction.

Figure 14: PoE Injector Dimensions
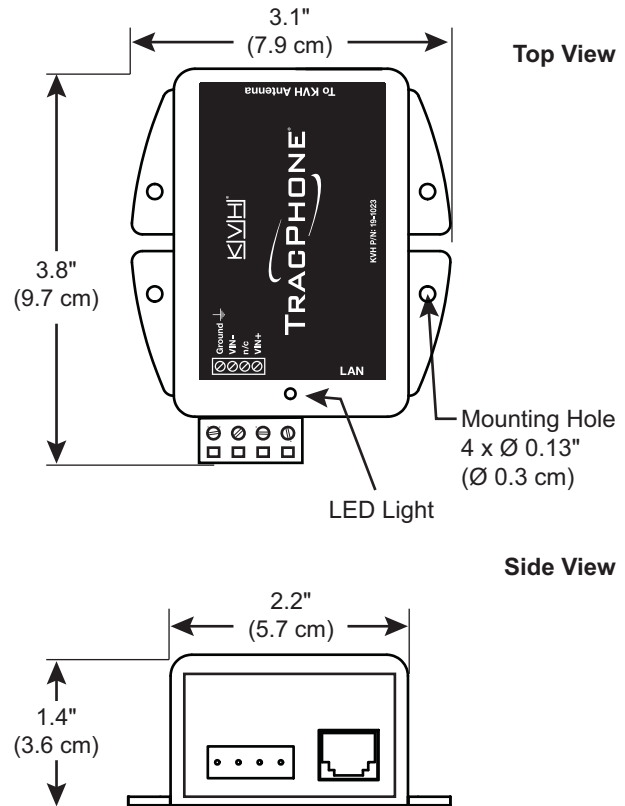
7 Wire the PoE Injector

Follow the steps below and on to wire the PoE injector to the antenna and connect power to the system.

Connect the PoE Injector to the Antenna

Connect the Ethernet cable from the antenna to the "To KVH Antenna" Ethernet port on the PoE injector (see Figure 15).

> **IMPORTANT!**
>
> Do not connect anything other than the antenna's Ethernet cable to the PoE injector's "To KVH Antenna" Ethernet port. The PoE injector supplies voltage that will damage other devices, such as laptop computers.

Connect Power to the PoE Injector

> **IMPORTANT!**
>
> A 5A circuit breaker should be installed between the PoE injector and vessel power to turn the TracPhone LTE-1 system on and off.

NOTE: An optional 24 VDC AC-DC power supply (5 A, 120 W) is available from KVH (part no. 72-0857).

a. Before you begin, disconnect vessel power.

b. Connect the PoE injector's power cable wires to the supplied 4-position terminal strip connector as shown in Figure 16 and described below:

- Connect the green "Ground" wire to ship's ground.

- Connect the black "VIN-" wire to DC Return.

NOTE: The third terminal is unused.

- Connect the red "VIN+" wire to the vessel's 12-24 VDC power source.
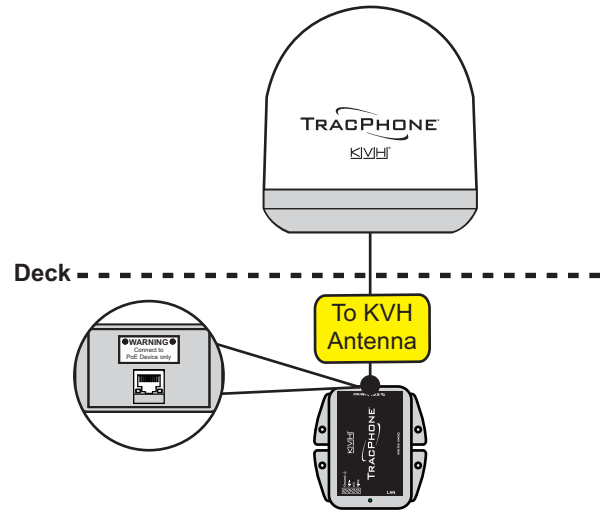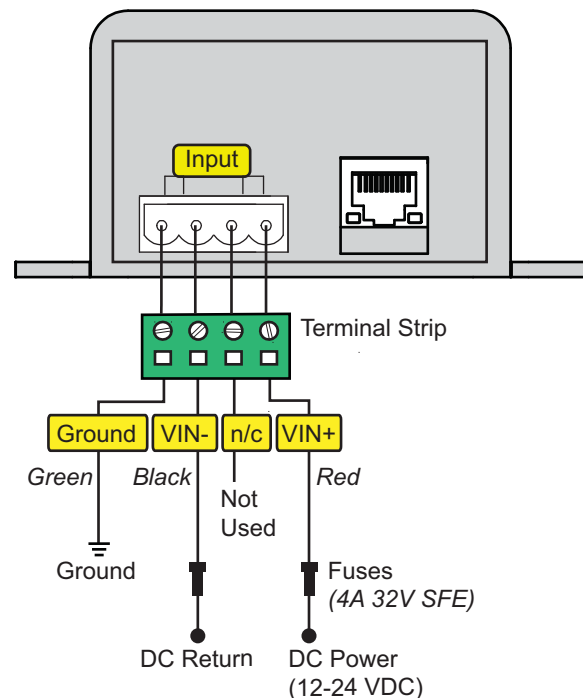
Figure 15: PoE Injector Antenna Connection
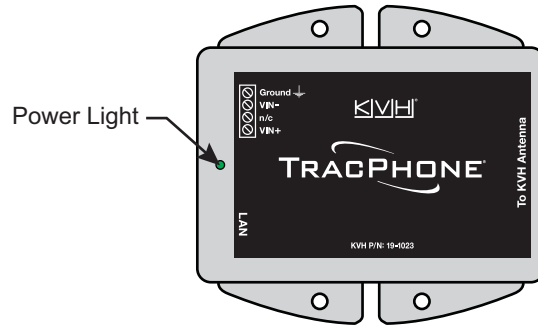

Figure 16: System Power Connection

7 Continued Wire the PoE Injector

Check For Proper Grounding

a. Check for proper grounding by using a multimeter to measure the AC and DC voltages at the ground and DC return terminal pins (see). The measured voltage should be less than 2 VAC and 2 VDC. **A higher voltage indicates a dangerous floating ground condition.**

b. Reconnect vessel power and turn on the circuit breaker to apply power to the antenna system. Within seconds, the Power light on the PoE injector should illuminate green (see Figure 17).

c. Repeat Step **a** with the circuit breaker turned on, looking for the same measured result.

⚠	WARNING
If you measure 2 volts or greater at the power/ground cable's terminal connector, notify the ship's electrician or authorized vessel representative immediately. This is a dangerous condition. Do not touch the PoE injector or connect anything to it until the problem is fixed.	

Figure 17: PoE Injector Power Light Location

Power Light

⑧ Test and Activate the System

Test the System

Before continuing, test the system for proper operation. The TracPhone LTE-1 system's factory default SSID should be visible on your mobile device.

a. Ensure that you are within range of the antenna's built-in Wi-Fi router (30 ft (9 m), depending on the layout and structure of the vessel).

b. Find the LTE system's SSID on your mobile device under Wi-Fi settings (see Figure 18).

Activate the System

The **subscriber** needs to activate the system for LTE service. To begin activation, instruct the subscriber to scan the QR code located on the Quick Start Guide. They can also visit www.kvh.com/lteglobalactivate to begin the activation process.

Figure 18: LTE System SSID on Android Phone (Example)
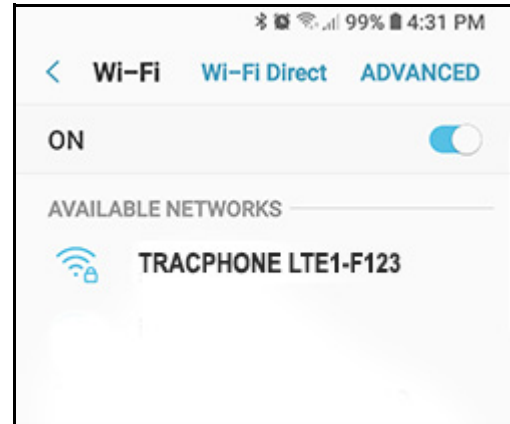
9 Connect to the Built-In Network

Network Option 1

Follow the steps below to connect to the built-in network. To use an existing local area network (LAN), refer to .

> **IMPORTANT!**
>
> By default, the TracPhone LTE-1 system's built-in Wi-Fi router has an IP address of 192.168.55.1 and assigns IP addresses to connected devices automatically. If this configuration conflicts with an existing onboard network or you would prefer to manually assign static IP addresses to connected devices, refer to for instructions.

Figure 19: Connect Using the Built-In Wi-Fi and LAN Port

Connecting Using the Built-In Wi-Fi

NOTE: The LTE system's built-in Wi-Fi range is nominally within 30 ft (9 m) of the antenna. To extend that range, connect a wireless access point (WAP) to the network. In all cases, an Ethernet connection will provide the fastest possible speeds.
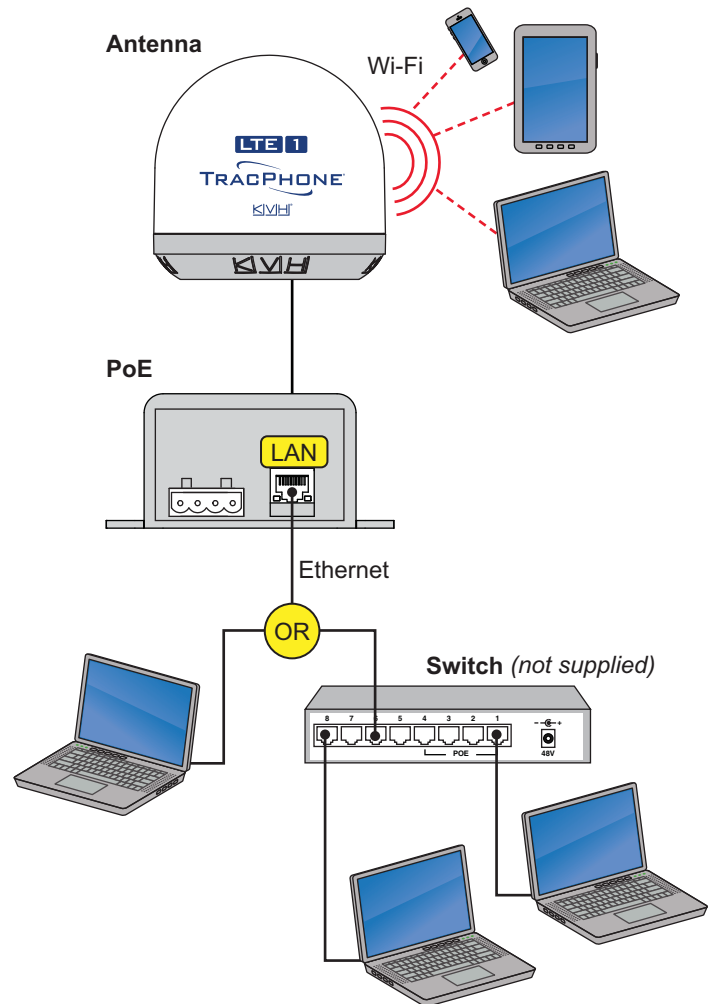
a. Select the LTE system's factory default SSID on your mobile device.

b. Enter the factory default Wi-Fi password to access the network.

c. If the customer wants to use a different SSID (network name) and/or password, follow the steps in .

Connecting Directly through the LAN Port

Connect a standard Ethernet cable from the Ethernet port on your computer to the "LAN" port on the PoE injector (see Figure 19).

To connect multiple computers, use a simple switch (see Figure 19).

10 Configure the Built-In Wi-Fi

The TracPhone LTE-1 system contains a built-in Wi-Fi router that can be configured in a variety of ways to meet the subscriber's needs. If you need to rename the SSID, change the Wi-Fi password, or disable the built-in Wi-Fi, follow these steps.

a. Connect a standard Ethernet cable from the Ethernet port on your computer to the "LAN" port on the PoE injector.

NOTE: As an alternative, you could access the router's web interface via the built-in Wi-Fi. But you would immediately lose your connection upon modifying the Wi-Fi settings.

b. Start your web browser and enter **https://192.168.55.1** to access the web interface.

c. Log in using the following credentials:
Username: admin
Password: TracPhoneLTE1

d. At the Dashboard, if you want to turn off the built-in Wi-Fi, you can use the drop-down menu under "Wi-Fi AP" (see Figure 20). This change takes effect immediately.

e. If you want to change the SSID (network name) or password, select the **AP** tab or select **Details** under "Wi-Fi AP" (see Figure 20). Then select **Add** (see Figure 21).

f. Make any changes to the settings requested by the subscriber (see Figure 22):

- **SSID:** Assign a unique name provided by the subscriber for the Wi-Fi network.

- **Enable:** Make sure it is checked to enable this Wi-Fi connection.

- **Security Policy**: Select "WPA2-Personal" to secure the Wi-Fi network.

- **Shared Key**: Enter a unique password provided by the subscriber (must be 8-20 characters).

IMPORTANT!

Failure to apply a security policy and unique password will make the LTE system's Wi-Fi network vulnerable to outside intrusion.
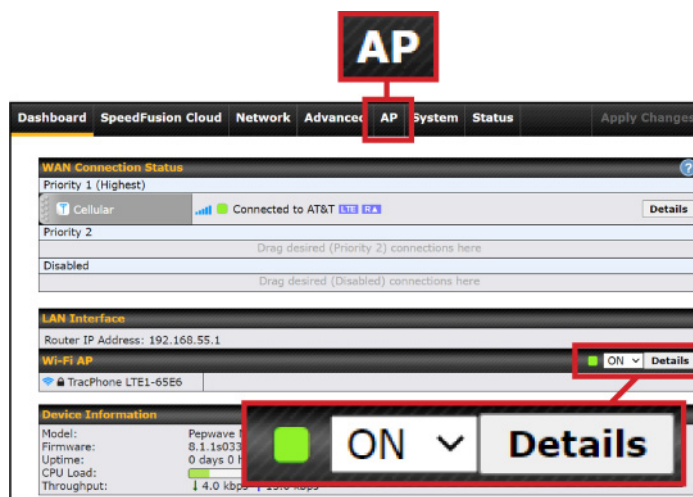

Figure 20: Built-in Router Dashboard
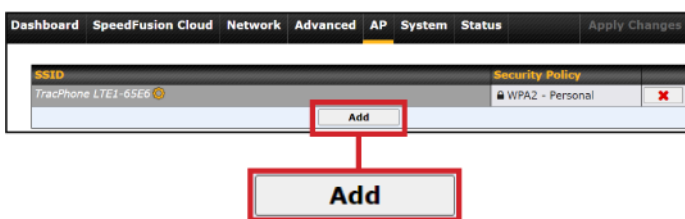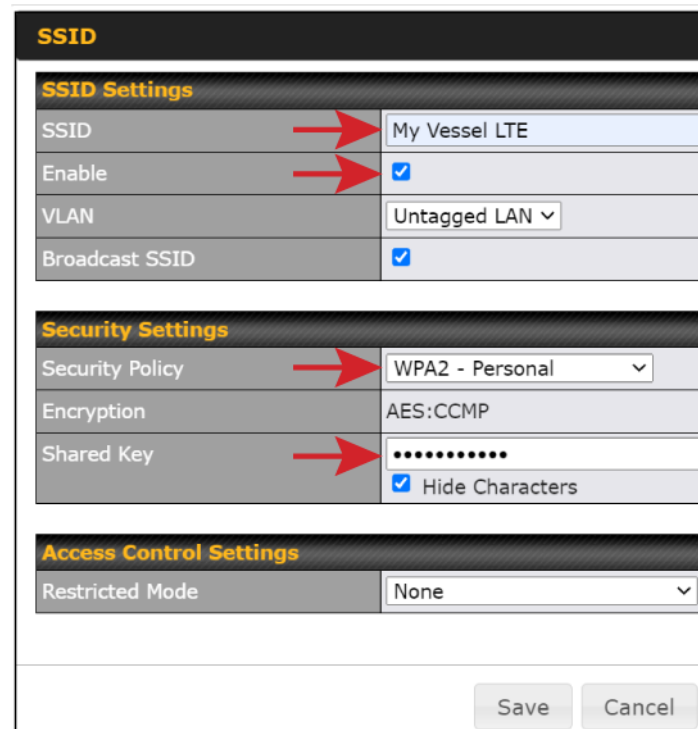

Figure 21: Adding a New SSID at AP Page

Figure 22: Built-In Wi-Fi Settings

Network Option 1

g. When you are finished, select **Save**. Then select **Apply Changes** in the upper right-hand corner (see Figure 23). *The button changes to "Confirm" on rollover.*

h. At the AP page, select the **X** button next to the factory default SSID to delete it (see Figure 24). Be careful not to delete the new SSID you just created.

i. In the rare event that you need to change the Wi-Fi channel, go to **AP > Settings**. Choose the desired channel and select **Save** (see Figure 25). Then select **Apply Changes**.
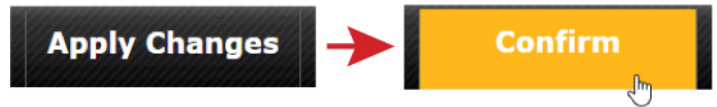
Figure 23: Applying Changes
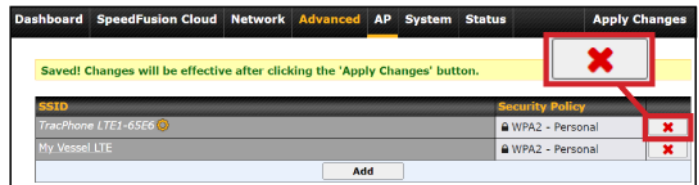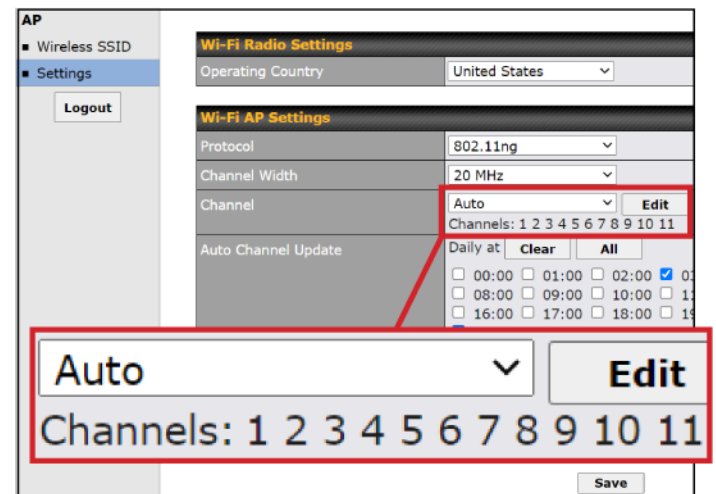

Figure 24: Deleting Factory Default SSID

Figure 25: Built-In Wi-Fi Channel Setting
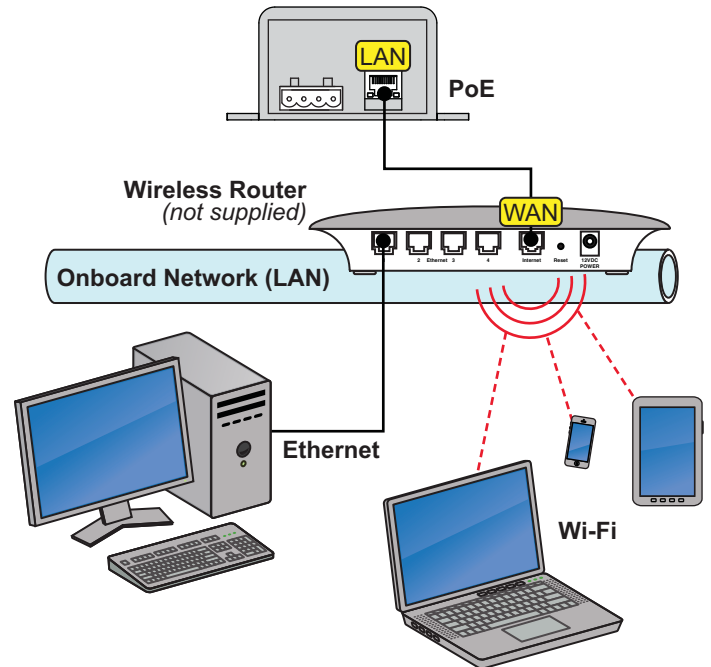
⑪ Connect to an Existing Network

Network Option 2

If the subscriber already has an existing LAN on the vessel, you can connect its router to the TracPhone LTE-1 system. Then all devices on the network will have access to the LTE service. Follow the steps below to set up this configuration.

a. Turn off the built-in Wi-Fi on the LTE system. Refer to *"Configure the Built-In Wi-Fi" on page 14* for details.

b. Connect a standard Ethernet cable from the "WAN" (Internet) port on the network router to the "LAN" port on the PoE injector (see Figure 26).

NOTE: If the IP address of the existing router is 192.168.55.1, you will need to change the IP address of either the router or the LTE system. Refer to "Advanced Network Settings" on page 19 for details.

Figure 26: Connect Using an Existing Network

LAN
PoE
Wireless Router
(not supplied)
WAN
Onboard Network (LAN)
2   Ethernet   3   4   Internet   Reset   12VDC POWER
Ethernet
Wi-Fi

12 Set Up Wi-Fi Calling

To use the TracPhone LTE-1 system to make and receive voice calls, you must either have a smartphone that supports Wi-Fi calling or an app, such as Skype™ or WhatsApp© Messenger that approximates the feature. To enable the Wi-Fi calling feature on your phone, follow the basic steps below or refer to your device's user documentation.

Figure 27: Wi-Fi Calling Enabled on an IPhone

Enabling Wi-Fi Calling on an iPhone

a. Navigate to **Settings** > **Phone** > **Wi-Fi Calling**.

b. Using the slider, turn on "Wi-Fi Calling on This iPhone" (see Figure 27).

Enabling Wi-Fi Calling on an Android Phone

(Android version 8.0.0 or later)

a. Tap the **Phone** app.

b. Navigate to **Settings** > **Wi-Fi Calling**.

c. Using the slider, enable Wi-Fi calling (changes from "Disabled" to "Ready for calls") (see Figure 28).
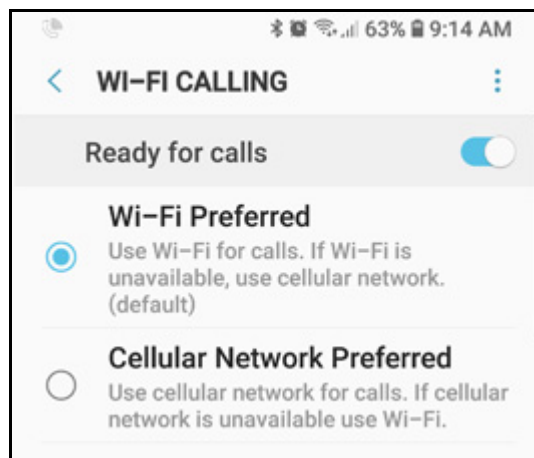
(Android versions earlier than 8.0.0)

a. Navigate to **Settings** > **Wireless & Networks > More...** > **Wi-Fi Calling** > **Wi-Fi Calling**.

b. Using the slider, enable Wi-Fi calling (changes from "Disabled" to "Ready for calls") (see Figure 28).

Figure 28: Wi-Fi Calling Enabled on an Android Phone

⑬ Educate the Customer

Deliver the Welcome Kit to the subscriber and explain how to use the system. Ensure the subscriber understands the following.

- How to:
    - Apply power to the system
    - Access the Internet
    - Access the router's web interface and customize the built-in Wi-Fi settings
    - Perform general troubleshooting

- The radome must remain installed on the antenna at all times, as it protects the antenna from wind, rain, and debris.

For More Information

Refer to the Quick Start Guide or the Help provided at kvh.com/lteglobalhelp.

Figure 29: Welcome Kit

A Advanced Network Settings

IMPORTANT!

The default network settings work well for most installations. Do not change them unless absolutely necessary.

In addition to built-in Wi-Fi settings, you can change other network settings at the router's web interface:

- **Changing the Built-In Router's IP Address:** By default, the system's built-in router has an IP address of **192.168.55.1**. If this configuration conflicts with an existing onboard network (e.g., another router on the vessel is using the same address), you can change the built-in router's IP address.

- **Disabling DHCP to Manually Set IPs:** By default, the system's built-in router assigns IP addresses to connected devices automatically. If you prefer to manually assign static IP addresses to your devices, you can turn off the router's DHCP server.

Follow these steps to make either change.

1. Connect your laptop or mobile device to the LTE system via either its built-in Wi-Fi or the "LAN" port on the PoE injector.

2. Start your web browser and enter **https://192.168.55.1** to access the web interface.

3. Log in using the following credentials:

   Username: admin

   Password: TracPhoneLTE1

4. At the router's web interface, go to the **Network** page.

5. Under LAN, select the **Untagged LAN** (see Figure 30).

6. If you want to change the IP address, enter it in the **IP Address** text box under "IP Settings" (see Figure 31).

7. If you want to disable DHCP, clear (uncheck) the **DHCP Server: Enable** check box under "DHCP Server."

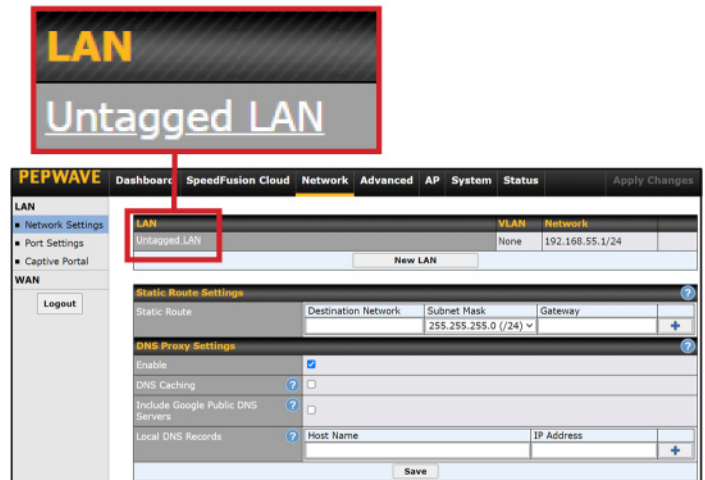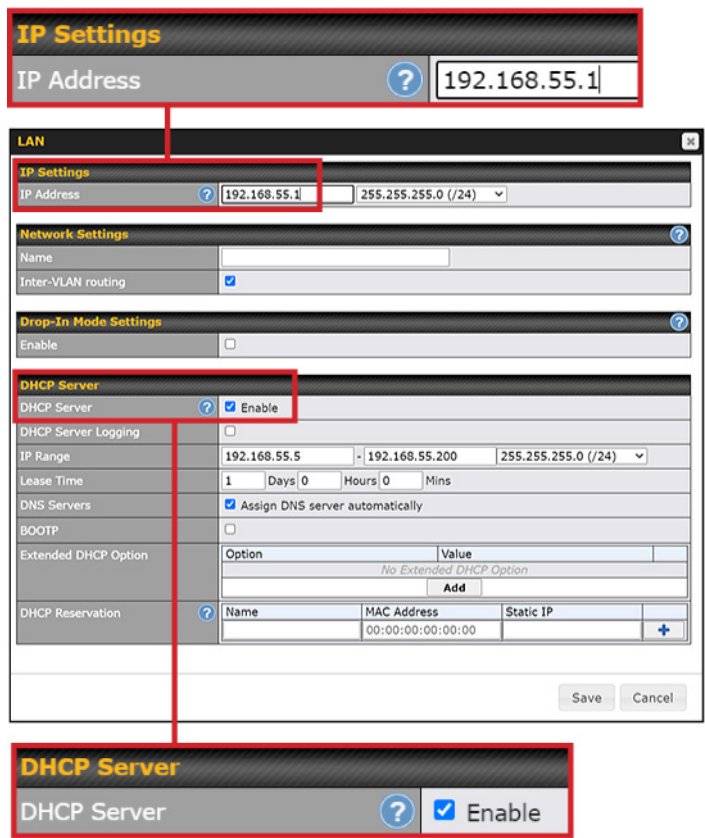Figure 30: Untagged LAN on Router's Network Page

Figure 31: LAN Network Settings

8. When you're done making changes, select **Save**. Then select **Apply Changes** in the upper right-hand corner.

NOTE: If you disabled DHCP, you need to enter a valid IP address in the network settings of each device you want to use with the LTE system. For example, if the LTE system's router is set to the default IP address of 192.168.55.1, you must set each device to any unique IP address ranging from 192.168.55.2 to 192.168.55.254.

B Wiring Diagram

Antenna

LTE 1
TRACPHONE
KVH

Inside Dome

LAN/WAN

Status
WiFi
Cellular

PoE Injector

To KVH Antenna

LAN

Vessel Network

Terminal Strip Connector

| Ground | VIN- | n/c | VIN+ |

Green   *Black*   *Red*

Not Used

Ground

Fuses
(4A 32V SFE)

DC Return   DC Power
(12-24 VDC)

KVH®
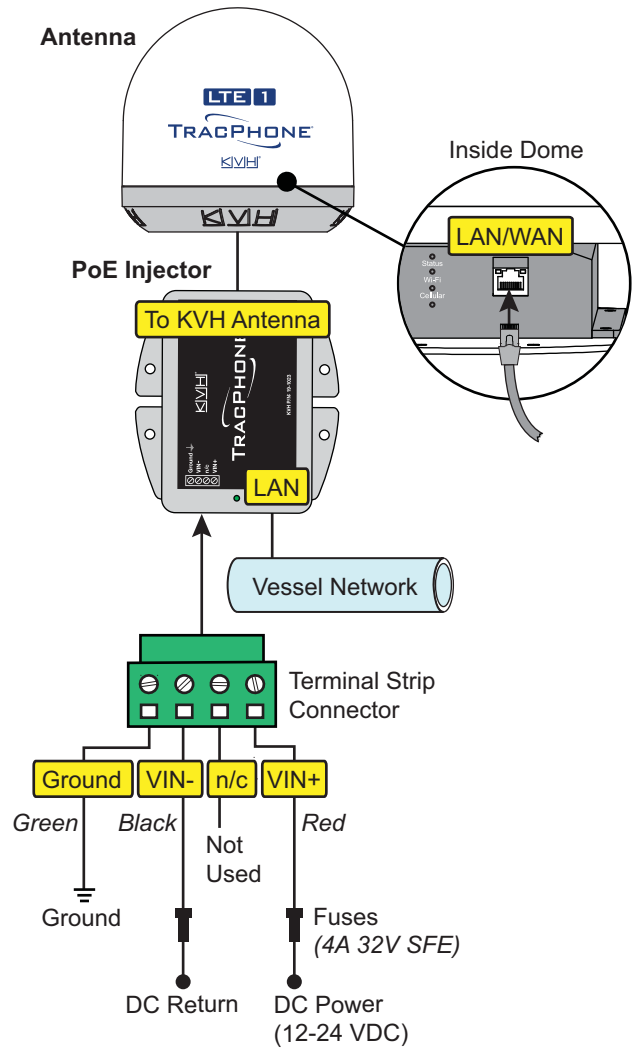
Regulatory Compliance

European Union Compliance

Hereby, KVH Industries, Inc. declares that the radio equipment type TracPhone LTE-1 is in compliance with Directive 2014/53/EU. For the full text of the EU Declaration of Conformity, go to www.kvh.com/euconformity.

Federal Communications Commission Compliance

The TracPhone system complies with Class B of Part 15 of the FCC (Federal Communications Commission) rules for radiated and conducted emissions.

FCC Identifiers: U8G-P1930LITE (WiFi)
                  N7NMC7455 (LTE Modem)

Use Conditions:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. To determine if the equipment is interfering with radio or television reception, remove or apply power to the equipment and observe if the interference goes away, or returns, when the unit is off or on. The user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult KVH for assistance.

IMPORTANT:

- To meet FCC requirements, double-shielded Ethernet cables are required to connect the LTE antenna to the ship's network.
- This equipment contains no user serviceable parts. Opening this unit will violate the warranty and may result in this equipment no longer complying with FCC requirements for Class B digital devices.

Radiation Exposure Statement

The antenna transmits up to 0.5 watts of radio frequency (RF) energy that is potentially harmful.
This equipment should be installed and operated with a minimum distance of 25 cm between the enclosed antenna and the operator. This equipment must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter produce procedures.

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