Smart-Reach Cellular V2 (SRC-MODEM-2) LX40-LTE

Quick Start Guide

SAFE FLEET
Driving Safety Forward™

Kit contents

- Sierra Wireless® AirLink® LX40-LTE (032-1083 or 032-1082*)
  *Includes Safe Fleet data plan
  Includes 10 ft./3 m power harness (4-wire)
- Cellular/LTE, MIMO, and WIFI antenna, 6.5 ft./2 m leads (085-1153)
- Installation package (020-1093)
  - 1A & 5A fuses, 2 fuse holders, and 2 butt-splice connectors
  - 2 pieces - mounting tape (685-1015)
- Ethernet (CAT5e) patch cable - 5 ft./1.5 m length (085-0065)

Step 1: Install the Modem

Step 1a: Mount the chassis

1. Select a flat mounting location that is not subject to moisture or constant vibration, with enough clearance for easy access to cable connections.

   Note: a 5 ft./1.5 m cable runs between the modem and the recorder Contact Technical Support if you require cable extensions.

2. Peel the adhesive backing from one side of each mounting tape strip and stick them both (evenly spaced) to the underside of the modem chassis.
3. Peel the adhesive backing from the exposed side of the tape strips on the underside of the modem chassis.
4. Position the device, then stick it to the mounting surface by applying downward pressure.


Step 1b: Mount the Antenna

1. Choose a flat mounting location on vehicle's roof. Ensure antenna leads (6.5 ft./2 m) can reach the modem.
2. Drill a pilot hole, then increase the hole diameter to 3/4" (19 mm). Remove any hole-cutting burrs.
3. Remove the protective backing from the underside of the antenna and feed the cables through the panel.
4. Position the antenna's long surfaces parallel with the side of the vehicle to minimize front profile.
5. Seat the antenna's threaded connector through the vehicle hole and stick the antenna to the roof panel by applying downward pressure.
6. Inside the vehicle, thread the lock-washer and nut onto the connector.
7. Tighten the nut until it stops firmly on the lock-washer. Do not over-tighten.
8. If any area around the antenna base is not fully compressed against the roof, seal completely with silicone.

Step 1c: Wire the system

1. Connect the three antenna leads to the modem as shown in the diagram below.
   - The "GPS/GNSS" lead is not used - bundle and stow it securely.
2. Connect the supplied Ethernet patch cable (085-0065) from the modem's **Ethernet** port to an Ethernet port* on the recorder.
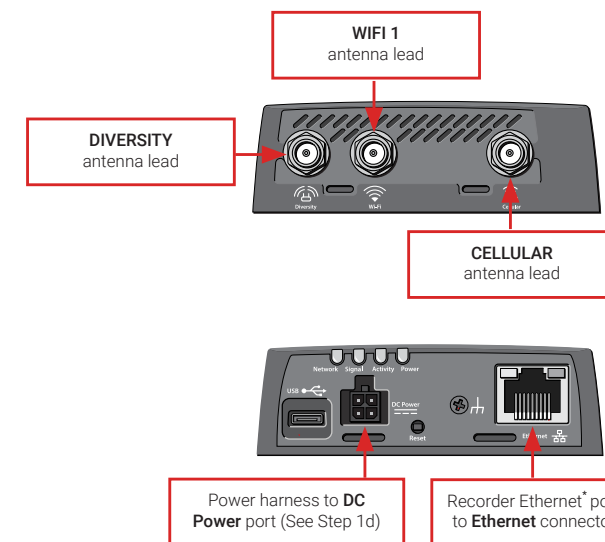
*For a list of recorder types and their Ethernet port names, see "Recorders - Rear Ethernet Ports" on page 8.

Step 1d: Connect the power harness

♡ Tip: Power-off timing

The modem is configured with an internal timer for power management. It does not require a separate control signal from the recorder.

1. Connect the red wire (pin 1) from the power harness to the 5A fuse holder.
   a. Insert the fuse, and connect the fuse holder to battery positive.
2. Connect the white wire (pin 3) to the 1A fuse holder.
   a. Insert the fuse, and connect the fuse holder to vehicle ignition.
3. Connect the black wire (pin 2) to battery negative.
4. Connect the power harness to the modem's **DC Power** port.
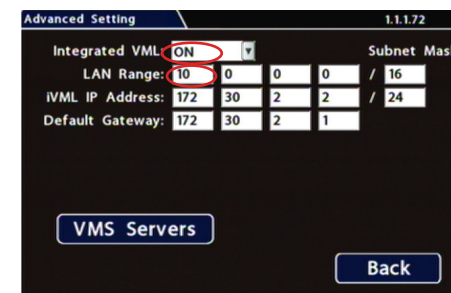

ⓘ Note: Live Streaming/Automatic Vehicle Location
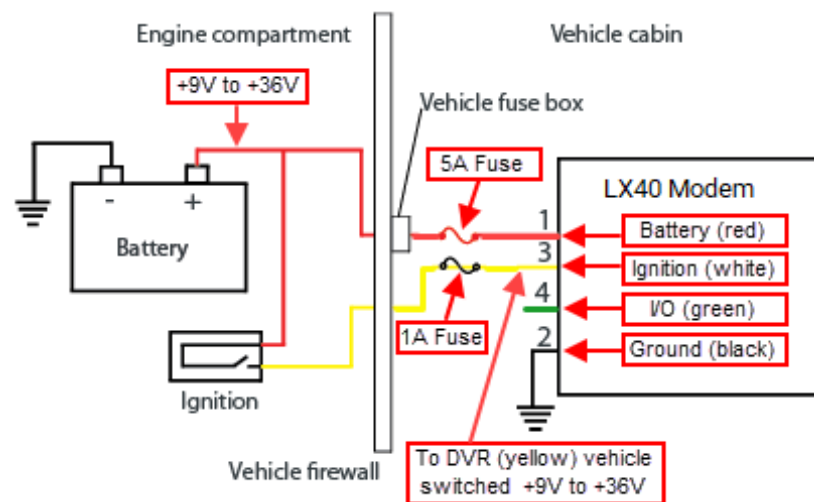
*Step 2 "Configure the Recorder" and Step 3 "Verify System Operation" are only required for installations using **Automatic Vehicle Location (GPS)** or **Live Streaming** features.

If you need more information, contact Technical Support.

ⓘ Note: Recorder firmware

If the modem will communicate with a legacy DVR (DX-HD or TL 4/2), confirm the DVR is running current firmware. If required, contact Technical Support for a DVR Firmware Upgrade Kit.

1. In the recorder menu, select **Configuration➔Network➔Advanced**.
2. Set **Integrated VML** to **ON**.
3. Enter a value in the **LAN Range**:
   - *If Wi-Fi is not installed*: enter **10** into the first octet.
   - *If Wi-Fi is installed*: contact Technical Support.
4. Click **Back** to save settings.
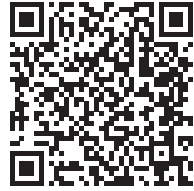
Step 3: Verify System Operation (*Optional**)

> **ⓘ Note: Online setup and verification**
>
> *This step is only required for installations using the Live Streaming or Automatic Vehicle Location features. If you need more information, contact Technical Support.
>
> Follow the instructions for "Provisioning Smart-Reach Cellular" on the Safe Fleet Community in the Installer Resources section:
>
> https://community.safefleet.net/tutorial/provisioning-sr-cellular/
>
> Scannable QR code linking to the provisioning tutorial on the Safe Fleet Community.

Status Indicators

Power on the Smart-Reach Cellular.

LEDs display operational conditions, as indicated:

LED	Color/Pattern	Description
Power	Off	No power or input voltage ≥ 36 Vdc or ≤ 7 Vdc
	Solid Green	Power is present.
	Solid Red	Standby mode
	Solid Amber	Entering low power mode or system low level boot.
	Flashing Green	When you press the reset button for less than 5 secs., indicates when to release the reset button to reboot the modem.
	Flashing Red	When you press the reset button for 5-20 secs., indicates when to release the reset button to reset the modem to the factory default settings.
	Flashing Amber	When you press the Reset button for more than 20 seconds, indicates when to release the Reset button to enter Recovery mode.
Signal	Solid Green	Good signal (equivalent to 3-5 bars)
	Solid Amber	Fair signal (equivalent to 2 bars)
	Flashing Amber	Poor signal (equivalent to 1 bar). If possible, we recommend moving the modem to location with a better signal.
	Flashing Red	Inadequate (equivalent to 0 bars). We recommend moving the modem to a location with a better signal.

NOTE: The quality of the signal strength is measured using the appropriate parameters for the radio technology in use.

LED	Color/Pattern	Description
Network	Solid Green	Connected to an LTE network
	Solid Amber	Connected to a 3G or 2G network
	Flashing Green	Connecting to the network
	Flashing Green (3 sec. on/1 sec. off)	WAN over Wi-Fi (LX40 is in Wi-Fi client mode)
	Flashing Red	No network available
	Flashing Red/ Amber	Network Operator Switching is enabled, but the modem is unable to locate the required firmware. For more information, refer to the ALEOS Software Configuration User Guide (Admin chapter) from the Sierra Wireless website.

Status Indicators (*continued*)

LED	Color/Pattern	Description
Activity	Flashing Green	Traffic is being transmitted or received over the WAN interface.
	Flashing Red	Traffic is being transmitted or received over the serial port. This behavior only appears if the modem is configured to display it. For more information, refer to the ALEOS Software Configuration Guide (Serial chapter) from the Sierra Wireless website.
	Flashing Amber	Traffic is being transmitted or received over both the WAN interface and the serial port. This behavior only appears if the modem is configured to display it. Refer to the ALEOS Software Configuration Guide (Serial chapter) from the Sierra Wireless website.
ALL	Green LED chase	Radio module reconfiguration/firmware update or Network Operator switching is in progress.
	Amber LED chase	ALEOS software update is in progress.
	Solid Amber	ALEOS software update complete
	Red LED chase	Recovery mode

Recorders - Rear Ethernet Ports

Connect to one of the following recorder Ethernet ports from the modem's Ethernet port, based on the recorder type:

Recorder	Rear Ethernet Ports
DH6, DH8	PON-LAN1
DH4, DH4C	POE-LAN
NH16, NH16K, TH8 or TH6	MODEM
TH4	WIFI
TH4C	POE-LAN
DX-HD	LAN2 or LAN3
TL2 or TL4	ETHERNET

Troubleshooting

The following table provides information and procedures for troubleshooting the Smart-Reach Cellular interface and the vMax software:

Symptom	Possible Cause	Potential Solution
The front panel **Network** LED (see "Status Indicators") flashes continuously	The modem is activating/ provisioning and attempting to connect to the mobile network.	Wait 5-10 minutes. The **Network** LED turns solid green when connection is successful.
Smart-Reach Cellular will not start	The power cabling may not be completely connected.	Check cable connections.

Service & Support

If your cellular modem is to be returned for service, please contact the Safe Fleet Technical Support team, provide the model and/or serial# of your unit, and ask for a **Return Merchandise Authorization (RMA)** number. An **RMA#** allows the support team to better track your product when it comes in for service. Please show the RMA# on the **outside** of the package.

ANY PRODUCT SENT WITHOUT AN RMA# MAY BE REFUSED!

Need Help?

For complete product details and access to our Document Library, please visit the Safe Fleet Community (https://community.safefleet.net).

To contact Safe Fleet Technical Support:

- Phone: 1.844.899.7366
- Email: PTsupport@safefleet.net

Warranty

For full warranty information, visit:

- www.seon.com/documents/Seon-Warranty.pdf