



Lytx[®] SF-Series Event Recorder Installation Instructions (North America Edition)

Last updated: 2022 November 14

THE DEVICE SHOULD BE INSTALLED AND MAINTAINED BY QUALIFIED TECHNICIANS. Only a properly qualified technician should install and maintain the SF-Series device(s). Any electrical work should be performed only by an MECP-certified or equivalent technician with an expertise in installing and troubleshooting advanced vehicle onboard components including multiplexed circuits. Lytx, Inc. disclaims all responsibility for any damages arising from improper installation and maintenance of the SF-Series device(s).

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Safety Instructions

Installation Safety Warnings

Read and follow the instructions and precautions in this guide and all documents referenced in this guide when installing this device. Always refer to the vehicle manufacturer's service manual for proper installation and wiring of any aftermarket devices, including the SF-Series device. Failure to do so may result in property damage and/or personal injury.

WARNING: Park the vehicle on a level surface before beginning any maintenance or installation.

Block the wheels to prevent the vehicle from moving. Never work under a vehicle supported only by jacks as jacks can slip and fall over.

WARNING: All wires that carry electrical current to the Lytx device(s) must be fused. Failure to fuse the power, ground, and ignition wires can lead to serious personal injury and/or property damage. If any wires or cables containing fuses/fuse boxes need to be cut or otherwise shortened, always be certain to replace such fuses/fuse boxes or install new ones.

WARNING: Wire Protection: Take all necessary measures to protect all wire runs through a metal surface with a grommet or other device and all wire runs outside the vehicle cab with a loom. Always protect against wire fatigue and harness abrasion by properly attaching wires at closely spaced intervals, while avoiding contact with sharp edges or **doing anything else that might result in exposed wires**. All wires should be secured with tie wraps at least every one foot (30 cm/300 mm) or less. Do not over-tighten any tie wraps.

EXPLOSION HAZARD: Do not disconnect equipment unless power has been removed and the area is known to be non-hazardous.

WARNING: Substituting or supplementing components may impair suitability and performance. If you are missing any components contact Lytx Technical Support Center at 925.732.4246 or email support@lytx.com.

WARNING: Wear safe eye protection to prevent serious eye injury when you perform vehicle maintenance or service.

Driver Safety Warnings

WARNING: In order to reduce the potential danger of injuries, the driver and front passenger must always be correctly seated with seat belts correctly fastened when operating the vehicle.

DISCLAIMER: The Lytx Event Recorder is a driver aid only, not a substitute for a safe, conscientious driver. The Lytx Event Recorder cannot compensate for a driver who is distracted, inattentive or impaired by fatigue, drugs or alcohol. Whether or not the Lytx Event Recorder is in use, it is always the responsibility of the driver to take appropriate corrective action. Never wait for the device to provide a warning before taking measures to avoid an accident. Failure to do so can result in serious personal injury or death or severe property damage.



Always, it is the driver's responsibility to:

- Use safe driving techniques
- Exercise proper judgment
- Maintain a safe speed and distance between vehicles
- Take measures to avoid an accident
- Comply with all applicable laws and regulations

WARNING: In certain conditions, including inclement weather, low visibility, certain road conditions (including poor lane markings, construction zones, dirt roads, heavy or complicated traffic, and curvy and winding roads), the Lytx Event Recorder may have limited to no functionality. The Lytx Event Recorder may not detect certain objects such as motorcyclists, bicyclists or pedestrians even in the most ideal conditions. Always keep the lens and view of the Lytx Event Recorder unobstructed and properly calibrated so as not to inhibit function. Driving in certain conditions or any interference with the Lytx Event Recorder can result in false, few or no warnings. The driver must always monitor traffic and surroundings and take measures to avoid an accident; failure to do so can result in serious personal injury or death or severe property damage.

WARNING: If the Lytx Event Recorder is not functioning properly at any time, please contact your supervisor and have the device inspected immediately to correct the issue. Whether or not the Lytx Event Recorder is functioning, it is the driver's responsibility to maintain vehicle control; failure to do so can result in serious personal injury or death or severe property damage.

CAUTION: While cleaning the device or the vehicle cab, do not apply compressed air or cleaning solutions (such as Windex) to the Lytx device. Usage of these products may cause damage to the device.

WARNING: The optional livestream feature may have an approximate delay of 10 seconds. Livestream should never be used to assist the driver in operating the vehicle. The driver is responsible for the safe operation of the vehicle at all times and must always take measures to avoid a collision.

Adherence to Applicable Local, State and Federal Laws

WARNING: Some countries/regions/jurisdictions have adopted, or may in the future adopt, laws that prohibit objects from being mounted on a vehicle's windshield or other locations in a vehicle. Always refer to any applicable laws that concern mounting devices on vehicle windshields before choosing a mounting location. You are responsible for complying with such laws, as Lytx, Inc. does not accept responsibility for your failure to do so.

USA Federal Communications Commission (FCC) Notice

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications to this product not expressly approved by Lytx, Inc. could void the user's authority to operate this equipment.



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. 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.

CAUTION: Exposure to Radio Frequency Radiation. To comply with FCC RF exposure compliance requirements, for mobile configurations, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

Canada – Industry Canada Notice

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil est conforme aux normes RSS exemptes de licence d'Industrie Canada. Son utilisation est soumise aux deux conditions suivantes: (1) Cet appareil ne doit pas causer d'interférences nuisibles et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences susceptibles de provoquer un fonctionnement indésirable.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

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

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAUTION: Exposure to Radio Frequency Radiation. To comply with RSS 102 RF exposure compliance requirements, for mobile configurations, a separation distance of at least 20 cm must be maintained between the antenna of this device and all persons.

Pour se conformer aux exigences de conformité 102 RSS RF exposition, pour des configurations mobiles, une distance de séparation d'au moins 20 cm doit être maintenue entre l'antenne de cet appareil et toutes les personnes.



Suppliers Declaration of Conformance

We, Lytx, Inc., hereby declare that the product listed below, to which this Declaration of Conformity relates, is in conformity with the Standards and other Normative Documents listed below:

Manufacturer's Name & Address:

Lytx, Inc.
9785 Towne Centre Drive
San Diego, CA 92121 USA

Declares that the following product: Product Name: Video Event Recorder Product Model:

- ER-SF1 (DC-6000-001)
- ER-SF64 (DC-6000-001)
- ER-SF200 (DC-6000-030)
- ER-SF300 (DC-6000-030)
- ER-SF400 (DC-7000-002)

The product specified above carries the marking, by complying with the essential requirements and provisions. Conformity is based upon the following standards:

Manufacturer's Contact:

Lytx, Inc.
9785 Towne Centre Drive
San Diego, CA 92121 USA
Phone Number: (858) 430-4000
Fax Number: (858) 430-4001

EMC & Radio:

CFR Title 47 FCC Part 15, Subpart B and C, Class B
Industry Canada ICES-003, Class B
Industry Canada RSS-Gen
Industry Canada RSS-210 (applicable only to cellular modem variant)
Industry Canada RSS-247
Mexico IFETEL
Mexico NOM-001-SCFI-1993



Device Installation Overview

Installation Warnings

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THIS GUIDE IS NOT A SUBSTITUTE FOR A QUALIFIED TECHNICIAN.

THE DEVICE SHOULD NOT INTERFERE WITH THE VEHICLE'S COMPUTER SYSTEMS. The SF-Series device interfaces with the vehicle's computer systems to capture data for safety analysis. However, it should not interfere with any of the vehicle's computer systems. If there is a malfunction of the vehicle's computer systems after installation, contact Lytx Technical Support Center at 925.732.4246 or email support@lytx.com immediately. Lytx recommends that you do not drive the vehicle until the malfunction is resolved. Lytx, Inc. disclaims all responsibility for any damages arising from improper installation and maintenance of the SF-Series device(s).

Before You Begin

Read and understand all instructions and procedures provided for the vehicle and the SF-Series device(s). This guide must be read in conjunction with the vehicle manufacturer's service manual, the Mounting Regulations, all instructions and procedures issued by Lytx, Inc., and any applicable federal, state, provincial and local laws that prohibit mounting devices on vehicle's windshield or other locations in a vehicle.

Read and observe all warnings, cautions, and safety notices in the instructions and procedures. They provide information to avoid serious personal injury, damage to components or both.

Follow the vehicle's maintenance, service, installation and diagnostic guidelines provided by the manufacturer of the vehicle.

Check for laws or regulations that prohibit objects from being mounted on a vehicle's windshield or other locations in a vehicle. You are responsible for complying with such laws and regulations, and Lytx, Inc. does not accept responsibility for your failure to do so.

Use special tools and safety equipment to avoid serious personal injury and damage to components.

Materials

Included in Every SF-Series Event Recorder kit	
	
SF-Series Unit	Standard Mounting Bracket
	
Two (2) T-27 Security Torx Screws	Alcohol Wipe

SF64/SF200/SF300/SF400 installations with J1939 9-pin connections	
	
Device Power Cable	Vehicle Interface Cable with inline fuses: Red and Black wires = 5-amp fuses Brown wire = 1-amp fuse
	
9-Pin Y Cable	Tamper Prevention Clip

For power-only installations (SF1/SF64 only)



Non-ECM, Device Power Only Cable with inline fuses:
Red and Black wires = 5-amp fuses
Brown wire = 1-amp fuse



Tamper Prevention Clip

For SF64/SF200/SF300/SF400 installations with J1939 connections



Device Power Cable



Vehicle Interface Cable with inline fuses:
Red and Black wires = 5-amp fuses
Brown wire = 1-amp fuse



J1939 CAN Coupler
Only included in kits for J1939 networks



Tamper Prevention Clip

For SF64/SF200/SF300/SF400 installations with OBD-II connections



Device Power Cable



Vehicle Interface Cable with inline fuses:
Red and Black wires = 5-amp fuses
Brown wire = 1-amp fuse



OBD-II Data Only Cable
Only included in kits for OBD-II networks



Tamper Prevention Clip

If you are missing any materials, contact the Lytx Technical Support Center at 925.732.4246 or email support@lytx.com to obtain the necessary materials before beginning installation. Supplementing or substituting shipped materials could impair suitability and performance.



Required Tools

In addition to all guides and reference documents that you should read before beginning installation, the following tools are required for installation:

- Wire cutter
- Wire crimper
- Voltmeter or multimeter
- Vehicle panel removal tool
- Flat-blade screwdriver
- Cable ties
- Phillips screwdriver
- Electric tape
- Tape measure
- Marking pen
- T-27 security Torx bit
- T-8 security Torx bit
- Micro USB cable
- Vehicle manufacturer recommended tools
- Internet-ready phone or tablet

Consult the vehicle's maintenance, service, installation, and diagnostic guidelines provided by the manufacturer of the vehicle for any additional tools needed.

Optional Tools

The following tools are not required for installation but can be helpful:

- Cordless driver
- Add-a-circuits or vehicle-specific connectors
- Grommets and looms
- Flashlight
- Paper towels/shop towel
- Utility knife
- Vehicle-specific panel clips
- Heating torch
- Heat shrink

Optional Parts

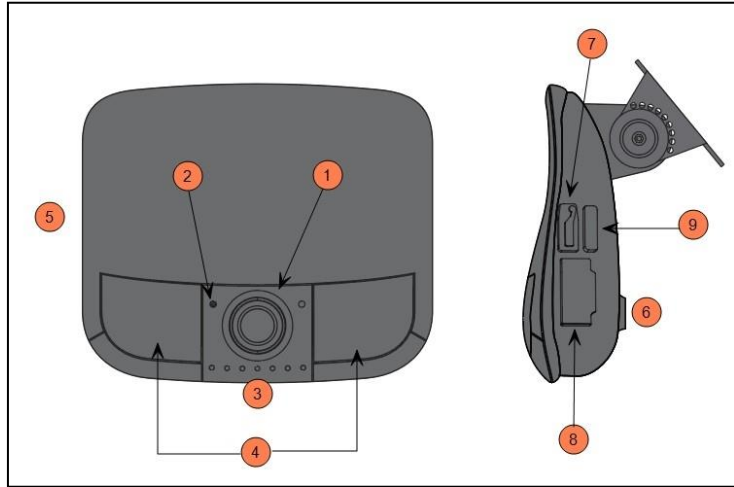
The following optional parts may be purchased from Lytx:

- Overhead Mounting Bracket
- Extended Mounting Arm
- Remote Push Button (Standard)
- Power Cable Extension (20-ft)

Device Features

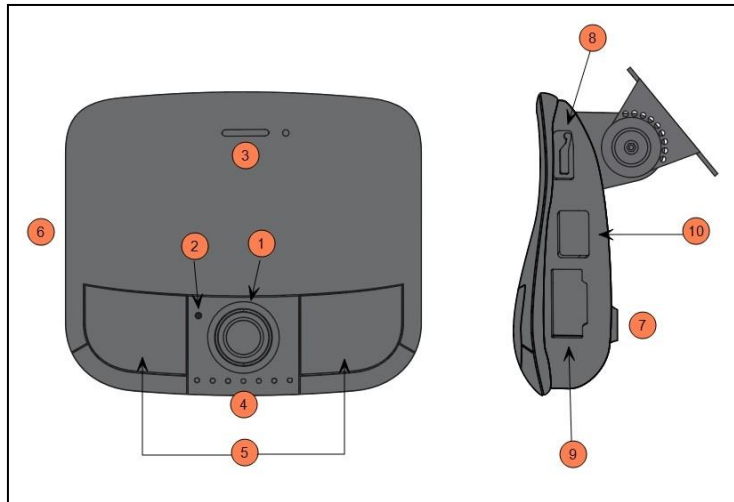
ER-SF1 and ER-SF64

1. Interior-facing lens
2. Microphone
3. LED status lights
4. Manual record buttons
5. Serial number (on side of device)
6. Exterior-facing lens
7. Micro-USB port
8. Device Power Cable port
9. SIM card port



ER-SF200, ER-SF300, ER-SF300W, ER-SF400

1. Interior-facing lens
2. Microphone
3. Ambient light sensor
4. LED status lights
5. Manual record buttons
6. Serial number (on side of device)
7. Exterior-facing lens
8. Micro-USB port
9. Device Power Cable port
10. SIM card and SD card port



SF-Series Installation Procedures

Pre-Installation Vehicle Check

Before beginning the installation, turn the vehicle on. Verify that no Check Engine lights, error codes, or warnings appear on the gauge console, dashboard, or vehicle display. It may be necessary to cycle through displayed messages or screens to verify. If any Check Engine lights, error codes, or warnings appear, report these to the site contact before proceeding.

For installations with OBD-II network connections: The SF-Series device cannot be connected to the OBD-II network if another 3rd-party device is also connected to the same network. To proceed with the installation, verify that no other 3rd-party devices are connected to the OBD-II diagnostic port.

Mount the Bracket and Event Recorder

WARNING: Before mounting the bracket and event recorder, consult the vehicle manufacturer's recommendations and any applicable federal, state, provincial and local laws that restrict mounting devices on a vehicle's windshield or other locations in a vehicle.

Mounting Preparation

CAUTION: An improperly positioned event recorder can reduce program effectiveness.

The event recorder should be mounted in a location that provides an unobstructed view of the driver and the road in front of the vehicle.

1. **Interior-Facing Lens View:** Should span from the outside shoulder of the driver to the outside shoulder of a front seat passenger. If possible, it should show the lap band of the seatbelt.
2. **Exterior-Facing Lens View**
 - a. Should be inside the path of the wiper blades.
 - b. Should capture a clear view of everything in front of the vehicle, beginning as close to the front of the vehicle as possible without cutting off the horizon.



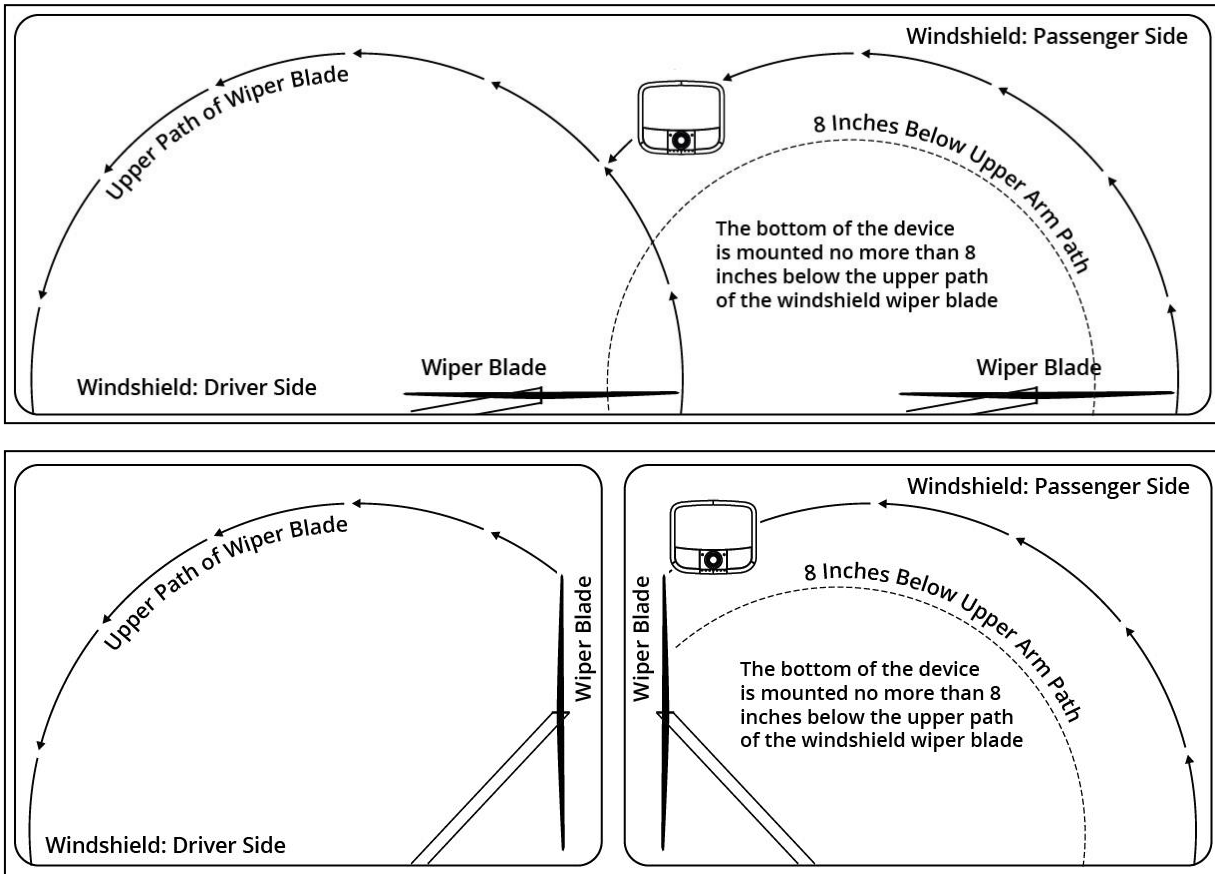
To temporarily gauge the best position, first loosen the Torx screws so the event recorder can rotate in the bracket. Then hold it up to the windshield.

If windshield mounting is not possible/permitted in the vehicle or jurisdiction, alternative mounting methods are available under [Installation of Optional Parts](#).

Mounting Location Recommendations and Restrictions

WARNING: Some countries/regions have adopted laws that restrict locations where objects can be attached to the vehicle windshield. Always refer to any applicable federal, state, provincial and local laws that concern mounting devices on vehicle windshields or other locations in a vehicle before choosing a mounting location.

For those vehicles that are subject to U.S. Department of Transportation, Federal Motor Carrier Safety Administration (FMCSA) regulation, the following figures provide guidelines for mounting the Lytx event recorder on the vehicle windshield that work within regulations set by the FMCSA*.



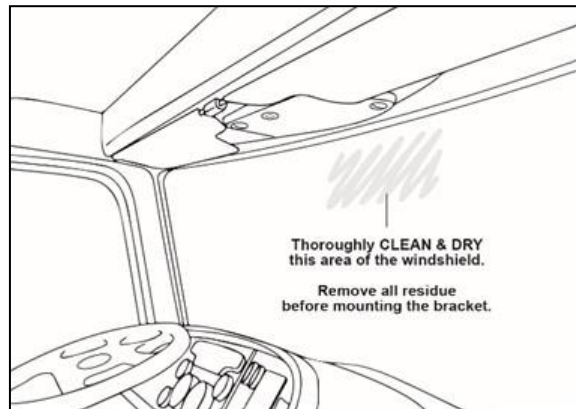
CAUTION: To mount the device, the air temperature must be at least 50°F (10°C). The ideal temperature range is 70-100°F (21-38°C).

CAUTION: Do not use a heat torch to heat up the windshield or adhesive on the bracket as this may reduce bracket adherence. If additional heat is required, use the vehicle heating system for the windshield.

CAUTION: Steps 1-3, cleaning the area and drying it, are critical to prevent the bracket from falling off later.

CAUTION: Do not peel the backing from the bracket's adhesive in this section.

1. Apply isopropyl alcohol on the windshield mounting area and dry it off with a clean cloth, removing any debris. This is the area behind the rear view mirror on the passenger side or the equivalent area if there is no rear view mirror (see below).
2. Clean the mounting area again with the Lytx-supplied alcohol wipe.
3. Wait 2 minutes for the mounting area to air dry before applying the device bracket. **Do not dry it with a cloth.**
4. Following the mounting location guidelines above, hold the assembly in place and trace the outline of the bracket on the windshield with a marker. Make sure the traced guide marks are level.
5. Remove the event recorder from the mounting bracket.
6. Check the fit of the bracket against the windshield. If the windshield is curved, you may gently bend the bracket so it lies flush against the glass.



Best practice: Select a surface location with minimal curvature.

7. Check again to make sure you've selected the best mounting location.
 - a. Sit in the driver's seat while holding the device up. Make sure it doesn't block the driver's view of the road.
 - b. Turn on the wipers and rotate mirrors, sun visors, and other objects near the device to make sure they cannot block either lens.

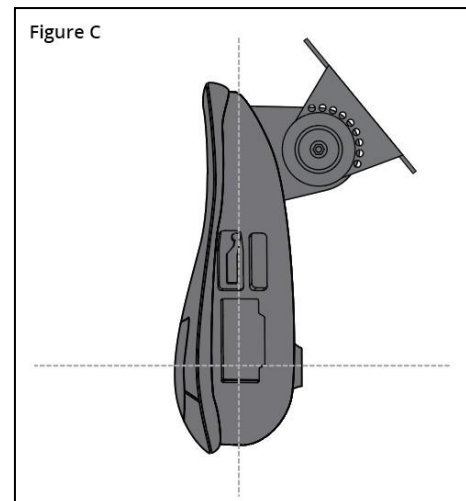
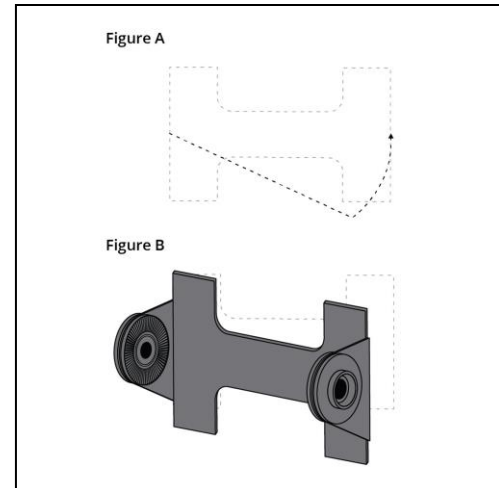
Attach the Bracket and Event Recorder

CAUTION: The adhesive is very sticky. Once applied, it will not easily come off. Take care to attach the bracket to the mounting location properly.

CAUTION: Do not apply excessive pressure as it may cause the windshield to break.

CAUTION: After removing the backing from the bracket's adhesive, apply the bracket to the windshield immediately. If you leave the adhesive exposed for too long, it may be compromised.

1. Remove the backing from the adhesive side of the bracket. Carefully attach the bracket to the windshield.
 - a. The bracket has slightly longer and shorter legs. Orient the bracket so the shorter legs are facing down.
 - b. Place the left edge of the bracket against the windshield, aligned with the marks, and make sure it is level.
 - c. Press the bracket firmly against the windshield starting at the left and pressing downward to the right.
2. Check from outside the vehicle for large air bubbles under the bracket. If you find any:
 - a. Apply additional pressure to the bracket.
 - b. Slide a pin between the bracket and windshield to let out the air.
3. Wait 10 minutes to allow the bracket's adhesive to bond.
4. Place the event recorder in the bracket.
5. Adjust the event recorder so it hangs vertically (plumb). See Figure C.
6. Secure the event recorder in the bracket using the two T-27 Torx screws.





Connect Electrical Wiring

WARNING: Only approved wire connection methods are recommended. Refer to the vehicle manufacturer's service manual to determine if soldering, sealing crimp connections, Add-A-Circuit, Posi-Tap, sealing butt connections, or OEM connections to open connection ports are approved. Never use plier tap products such as insulation displacement connectors (i.e. ScotchLoc connectors) when installing the SF-Series device(s).

WARNING: Never wire the SF-Series device(s) in a manner that shares a connection with another aftermarket product in the vehicle. Independent connections should always be used.

WARNING: All wires that carry electrical current to the SF-Series device(s) must be fused. Failure to fuse the power, ground, and ignition wires can lead to serious personal injury and/or property damage. If any wires or cables containing fuses/fuse boxes need to be cut or otherwise shortened, always be certain to replace such fuses/fuse boxes or install new ones.

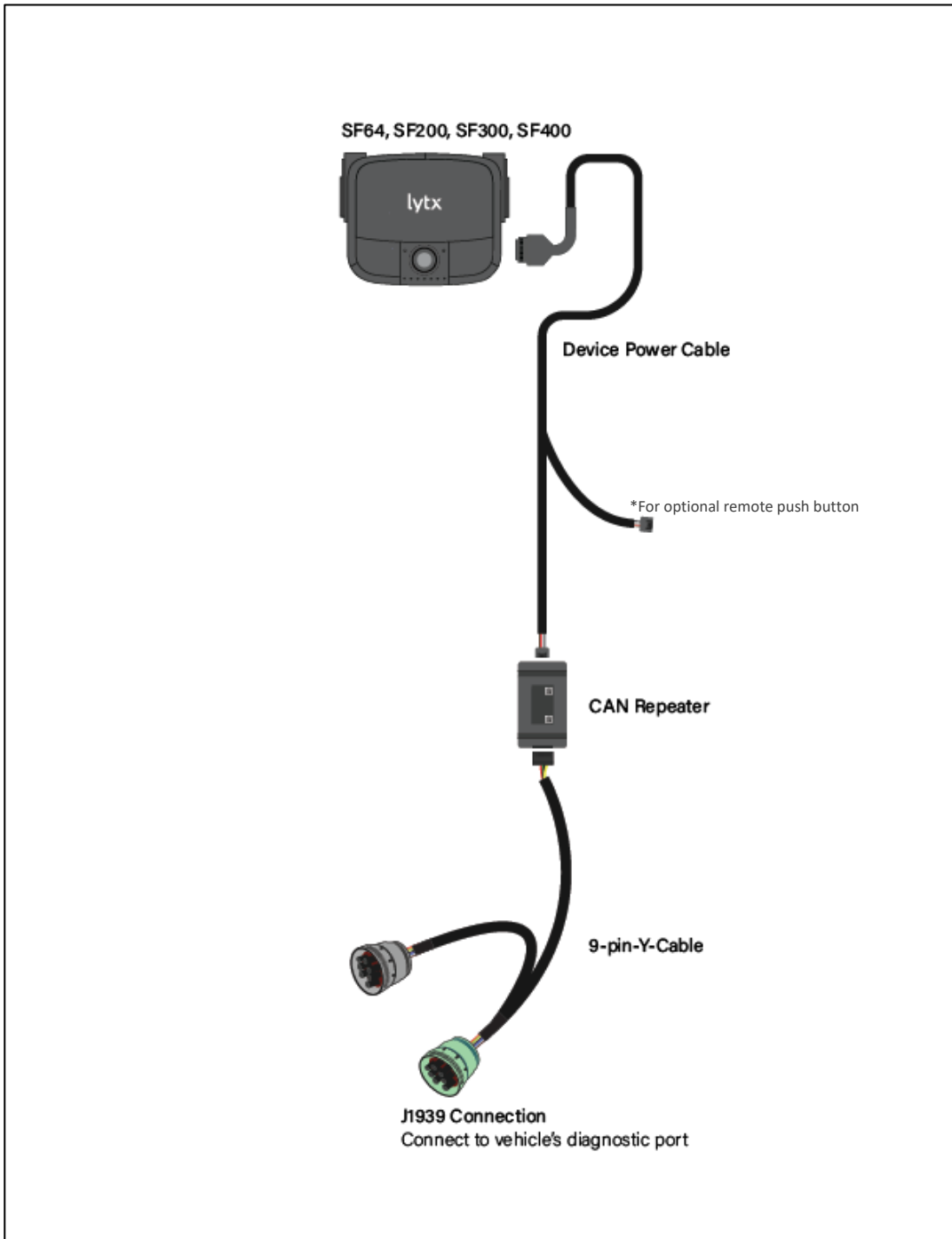
WARNING: Wire Protection: Take all necessary measures to protect all wire runs through a metal surface with a grommet or other device and all wire runs outside the vehicle cab with a loom. Always protect against wire fatigue and harness abrasion by properly attaching wires at closely spaced intervals, while avoiding contact with sharp edges or **doing anything else that might result in exposed wires**. All wires should be secured with tie wraps at least every one foot (30 cm/300 mm) or less. Do not over-tighten any tie wraps.

WARNING: Cable Routing: Make certain that neither the cable nor your installation activities interferes with any airbag-related mechanisms or otherwise risks affecting airbag deployment. Consult the vehicle manufacturer for the location of any airbag sensors and systems and restrictions that may apply.

Electrical Connection Overview

The following diagrams cover all available cable solutions for the SF-Series device. Only one cable solution will be applicable to each device install.

Installations with Default J1939 9-pin Diagnostic Cables



Installations with 9-pin Diagnostic Port Cable

1. Route the Cable

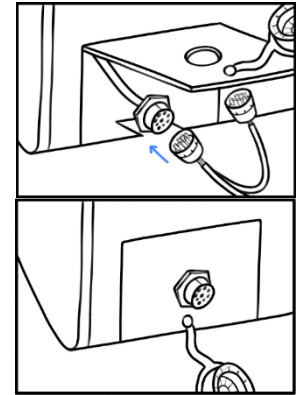
Plug the power cable into the device. Route and tuck the cable into the side door and floor.

2. Connect Power

Locate the vehicle diagnostic port. Remove it from the panel where it's mounted. Plug the male connector of the 9-pin cable assembly into the vehicle port and properly secure it in the dash area. Also gets ground from this connection.

3. Replace Diagnostic Port

Mount the spare port from the cable assembly into where the vehicle port was originally located. Use one of the provided fitting brackets to mount it. For more detail, refer to the "Fitting Brackets" section on the last page. Secure the connections and reinsert the vehicle panel. By the end, the panel should look the same as when you started.



Additional [J1939 9-pin Install instructions](#) are available in the Support Center.

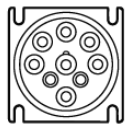
9-pin Fitting Brackets

Provided J1939 9-pin fitting brackets



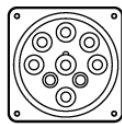
1. Identify the mounting clip that matches the vehicle's connector.

A. Flange Mount



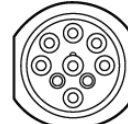
Typically found in Freightliner vehicles.

B. Screw Mount



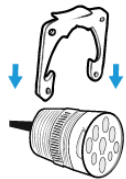
Typically found in Navistar-International vehicles.

C. Jam Mount

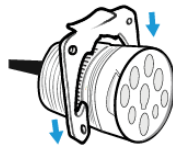


Typically found in older vehicles.

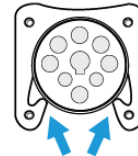
2. Attach the appropriate mounting clip, ensuring that the 2 teeth lock.



Unscrew the jam nut on the 9-pin connector to slide the bracket in to the center groove.



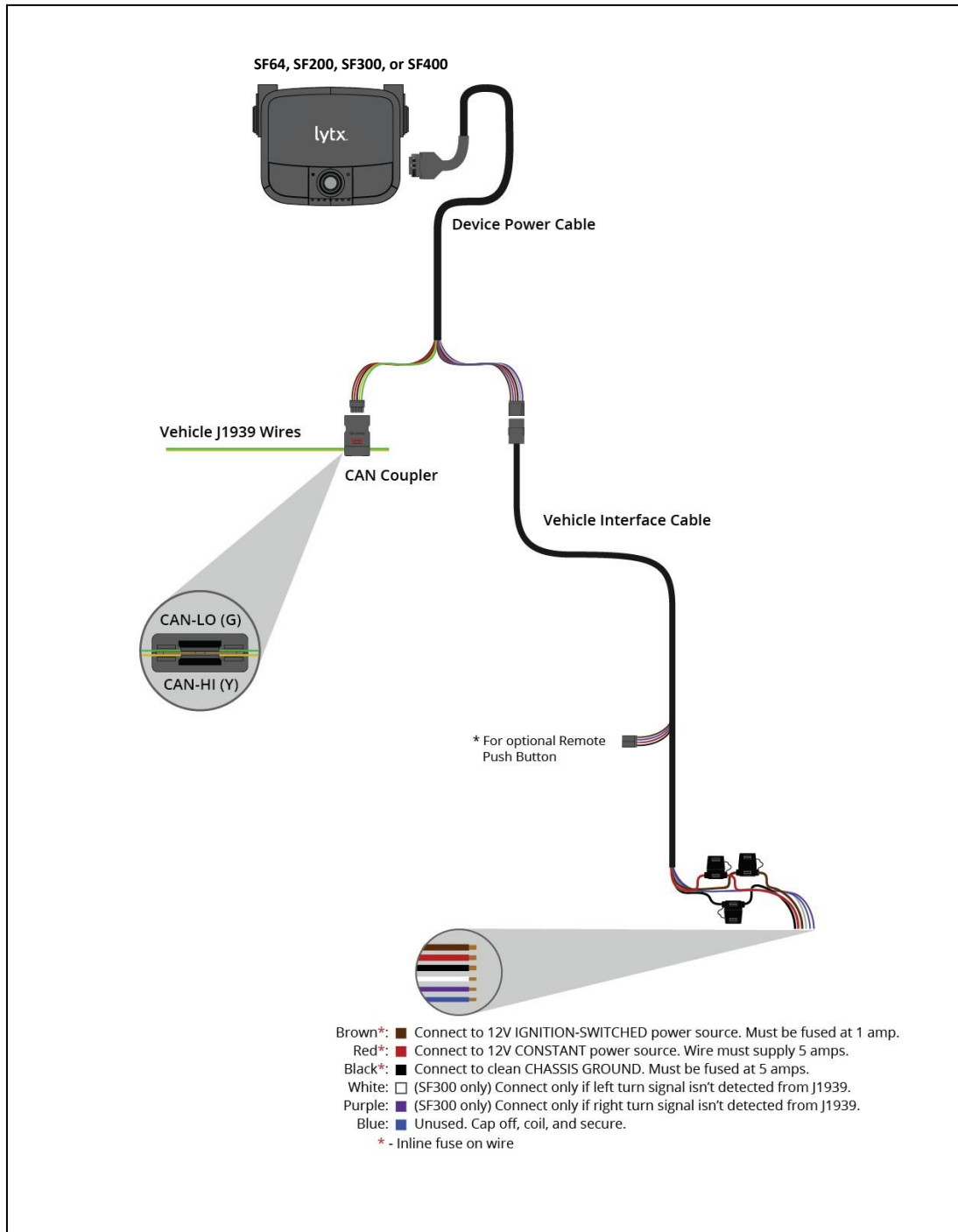
Align W shaped indexing points in the center of the bracket with the matching bracket fit location in the center groove of the Lytx 9-pin connector.



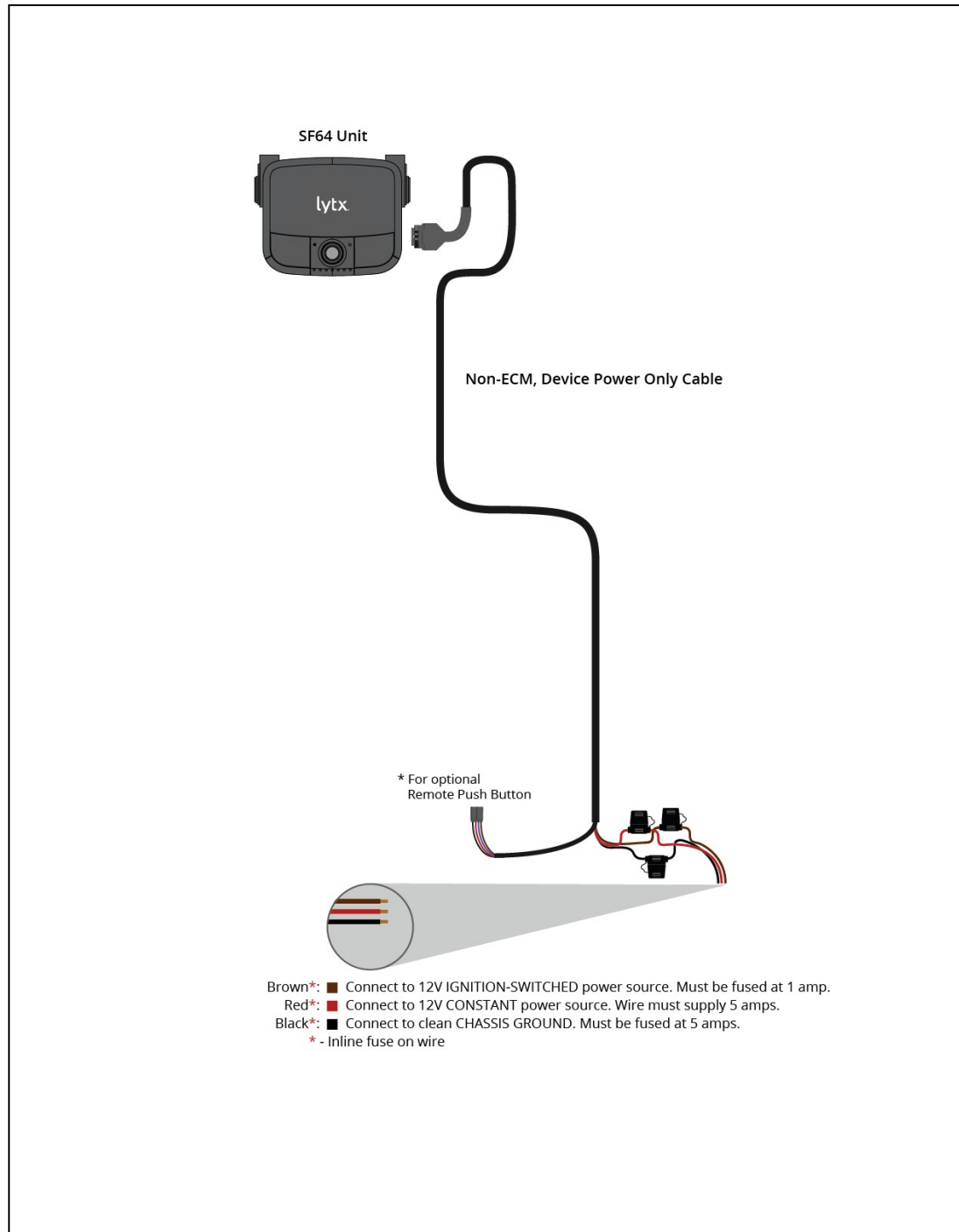
Apply inward pressure to the left and right tabs until fully seated. Tighten the jam nut securing the bracket. Refer to the arrows above for the bracket fit location.

Washer can be used to create a more secure fit of the port between the nut and the mounting plate. Commonly used on FL Cascadia P4 and Kenworths.

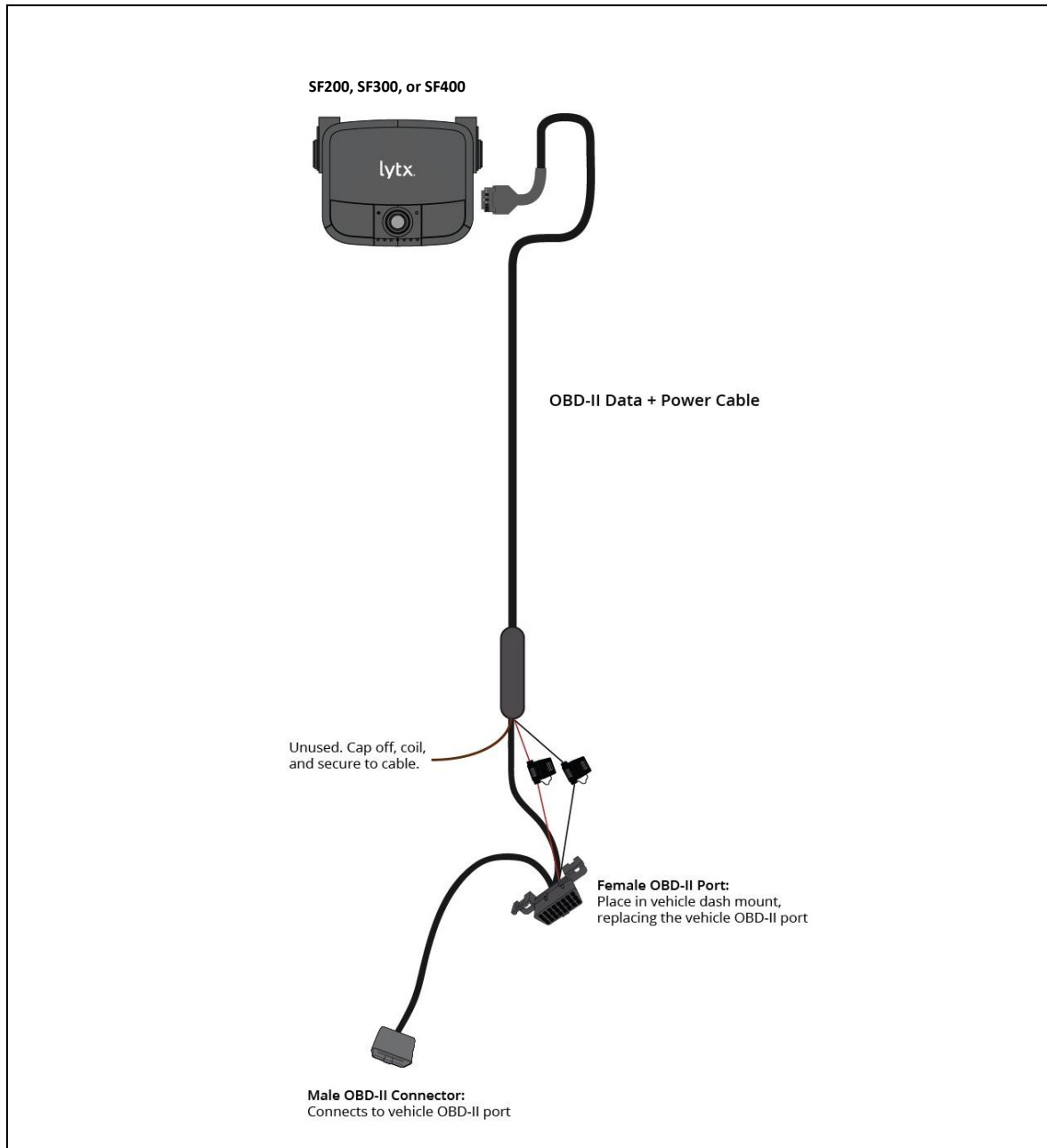
Installations with J1939 Connections



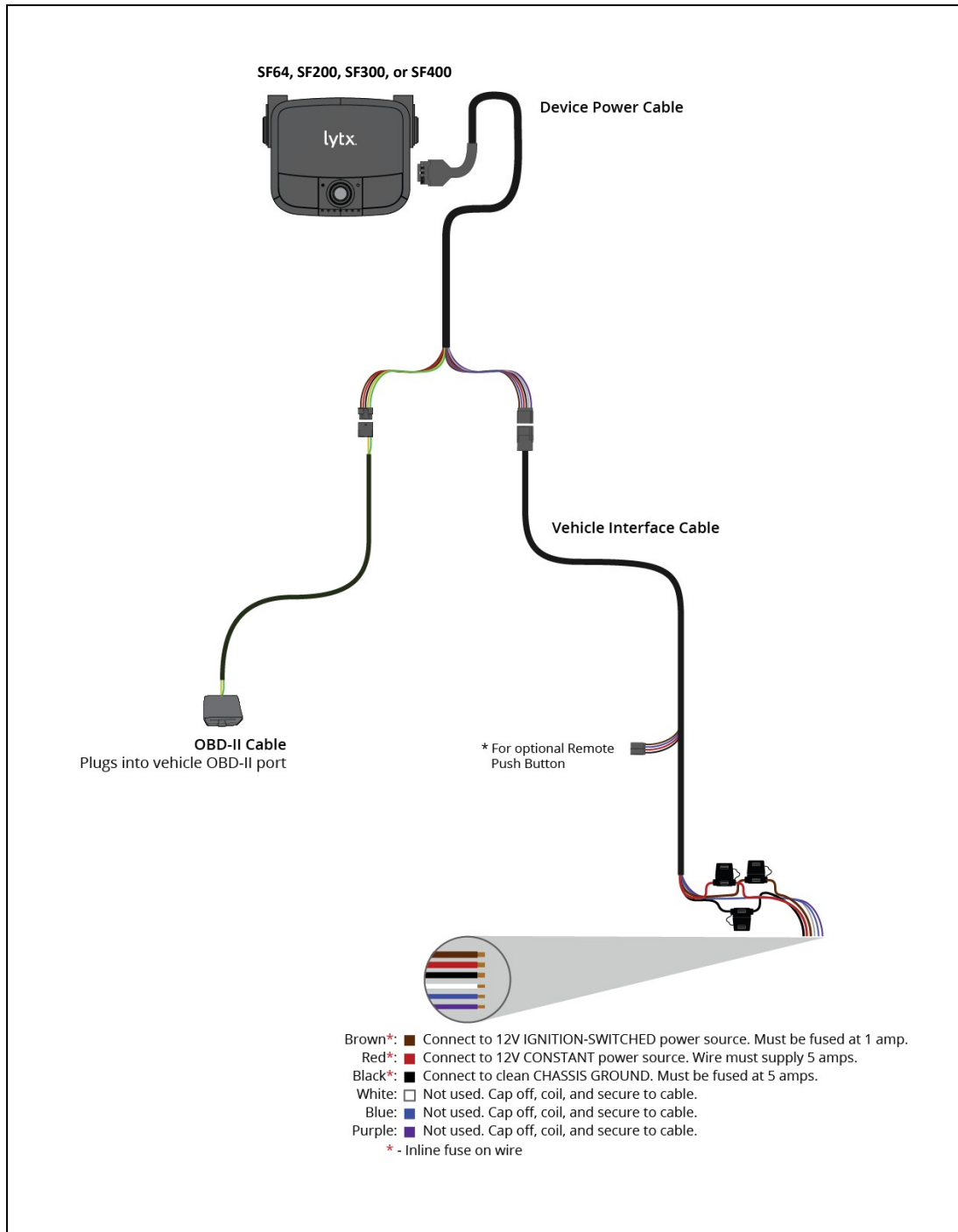
Power-only installations (SF1/SF64 only)



Installations with OBD-II Data + Power Cable



Installations with OBD-II Data Only Cable



Connect to the Vehicle OBD-II Network

There are 2 methods for connecting to the vehicle OBD-II network, each with a separate cable configuration.

The primary method is using the OBD-II Data + Power Cable, which is a single cable solution.

1. Locate the vehicle's OBD-II port, typically located on the driver's side underneath the dashboard. Remove it from its dash mount.
2. Plug the male OBD-II connector into the vehicle's OBD-II port (refer to the diagram on page 22
3. Secure the female OBD-II port. This may be used for maintenance and inspection purposes.
4. Skip directly to Route the Device Power Cable.

The secondary method is using the OBD-II Data Only Cable, which is a multi-cable configuration. If your kit includes this cable, plug the OBD-II connector into the vehicle's OBD-II port, which is typically located on the driver's side underneath the dashboard. Connect the other end to the device power cable. Refer to the wiring diagram for Installations with OBD-II Data Only Cable. With this method, you still must connect the constant power, ignition, and ground wires. Proceed to the following sections for guidance there.

Wiring and Termination Suggestions for Vehicle Interface Cable

WARNING: Failure to use proper wiring and wire terminations could lead to personal injury or property damage. The following Wire Termination Suggestions should be followed to ensure proper connections.

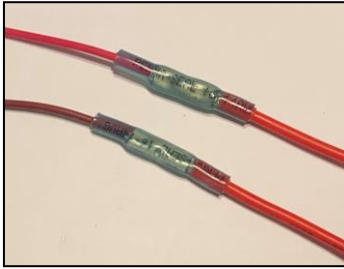
When installing the event recorder, there are several key rules to produce reliable electrical connections.

1. **Prohibited connectors:** The use of insulation displacement connectors (i.e. ScotchLoc connectors) (Fig. A), unsealed quick slide/spade connectors (Fig. B), and non-sealing butt connectors is prohibited. In addition, the use of fuse taps on ECM, ECU, or control module circuit fuses is prohibited.

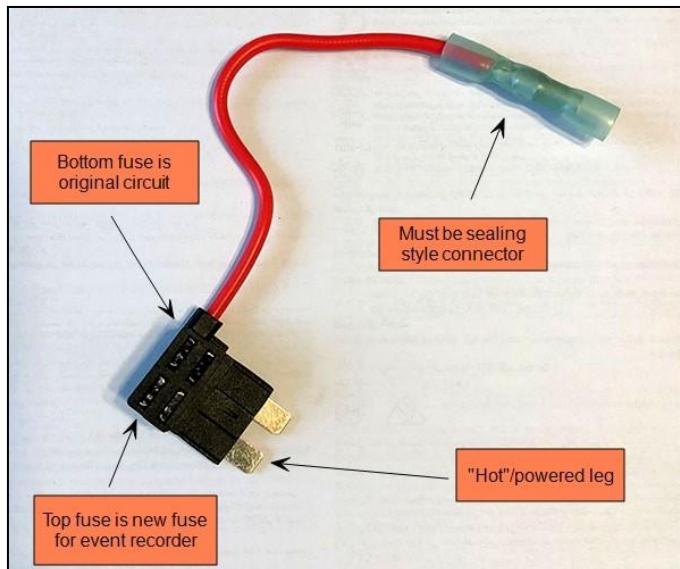


2. **Use ONLY 16-gauge automotive primary wire to connect to automotive circuits.** Specialty wire might be superior when used in its native environment, but not in the automotive field. (For example, Teflon wire is intended for high heat conditions, but should never be used for connections of the event recorder in the vehicle.)
3. For all connection methods, **do not leave any exposed wire near the connector.**
4. **Posi-Tap connectors:** Posi-Tap wiretap connectors may only be used inside the cab of the vehicle and only for event recorder inputs such as ignition. They cannot be used for constant power or ground. The Posi-Tap connectors must be the proper gauge size for the wire it's connecting to.

5. **Crimp style connectors:** All crimp style connectors must be the sealing type. Verify the crimped connection is secure. Then heat up the connector to melt and seal it.



6. **Fuse taps/Add-A-Circuits:** If using a fuse tap (Add-A-Circuit), make sure to test with a meter that the circuits only share the hot leg of the fuse receptacle to ensure the circuits are separately fused. If installed backwards, a fuse tap will compromise the original circuit. Below is one example:



Refer to the "Fuse Taps/Add-A-Circuits Suggestions" section below for more information.

7. **Quick slide/spade connectors:** Quick slide/spade connectors may be used only if they are either properly insulated OR they are sealed with heat shrink. Otherwise, these may not be used.



Fuse Taps/Add-A-Circuits Suggestions

If you're connecting fuse taps/Add-A-Circuits to the fuse panel, use the following criteria to select appropriate locations for the Constant Power and Ignition connections.

1. Connect to open circuits without a fuse already in place, if available.
2. Connect to slots for non-critical functions (e.g. radio or power windows). Avoid connecting to critical functions (e.g. airbags or control modules) as this may cause the vehicle to be inoperable and/or create a safety hazard. Refer to the examples below.

Best slots:

- Radio
- Power Outlet
- Heated Seats
- Power Seats
- Power Windows
- Upfitter/Auxiliary Options

Slots to avoid:

- Control Modules (ECM, BCM, TCM, Etc.)
- Lights (Headlights, Taillights, Brake, Hazards)
- Airbags
- Horn
- Fuel Pump

Good slots:

- Power Mirrors
- HVAC Controls

Event Recorder Electrical Connections

1. Find a suitable location to make electrical connections (usually behind/under the dashboard or power distribution center).
2. Connect the red, brown, and black wires from the Vehicle Interface Cable/Non-ECM, Device Power Only Cable leads to the vehicle as shown in the Electrical Connection Overview . Be sure to follow the parameters for each wire, detailed above.

A minimum of three connections are required for the event recorder to function. These leads are found on the Vehicle Interface Cable/Non-ECM, Device Power Only Cable terminating at the female end of the Molex connector.

1. **Red wire:** Provides primary power and must be connected to a continuous power source. This lead has a 5-amp inline fuse.
2. **Brown wire:** Functions as an ignition-sense, used by the event recorder to perform functions such as activating the Infrared Illuminator when the vehicle ignition is switched on or activating Hibernation mode when the ignition is switched off. This lead has a 1-amp inline fuse.
3. **Black wire:** Functions as ground and must be connected to an appropriate chassis connection. This lead has a 5-amp inline fuse.





RED WIRE to Power Source

Connect the RED WIRE to a 12V/24V Power Source that's ALWAYS ON.

CAUTION: This is a fused connection. Do NOT cut off or remove the inline fuse.

The event recorder always remains "ON." This requires a 12V or 24V power source that is not controlled by the key nor any other device or switch. Typically, this connection is made just after the fuse box on the battery-side of any vehicle control modules. Use a voltmeter to make sure the circuit provides continuous 12V or 24V power when the key is removed from the ignition and all lights, devices and switches are off.

Ensure Sufficient Current Draw

If you're tapping into an existing vehicle wire, make sure it can handle the additional current draw of the event recorder. A wire that reads 12V or 24V on a voltmeter may not necessarily be able to supply enough current to the existing circuit and the event recorder. The gauge of wire being tapped into provides a good indication. A larger gauge wire is often the best choice.

BROWN WIRE to Power Source

Connect the BROWN WIRE to 12V/24V Power Source that's IGNITION-SWITCHED.

CAUTION: This is a fused connection. Do NOT cut off or remove the inline fuse.

This connection requires a 12V or 24V power source that is "on" either when the key is turned all the forward to the ON position, when the engine is running, or the key is turned all the way back to the OFF position.

Failure to properly connect this fused connection may lead to vehicle battery drain and/or false ignition signals. Do not connect to an accessory circuit.

Note for Brown Wire Connections

Connect this wire to a circuit that is on the battery side of any modules. Consult the vehicle wiring schematics or a local authorized dealership to obtain this information. Ensure that you do not make a connection to a modulated circuit—one that comes out of a computer control module running some subsystem in the vehicle. This can give false ignition on/off signals.

BLACK WIRE to Vehicle Ground

Connect the BLACK WIRE to a Good Solid Vehicle Ground.

CAUTION: This is a fused connection. Do NOT cut off or remove the inline fuse.

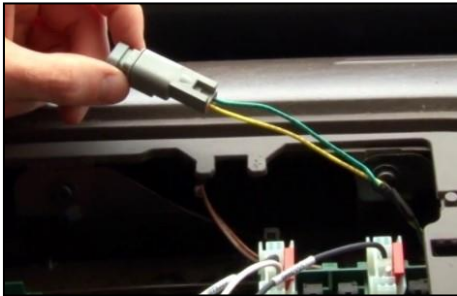
This connection is usually made via ring terminal to ground lug in the vehicle, supplied by the vehicle manufacturer for aftermarket products. If one is not available, ensure that the connection is solid to a metal portion of the vehicle which is directly grounded to the vehicle frame. In this case, use a self-tapping screw for ground. Ensure there is no corrosion or paint interfering with this connection.

Connect to the Vehicle J1939 Network

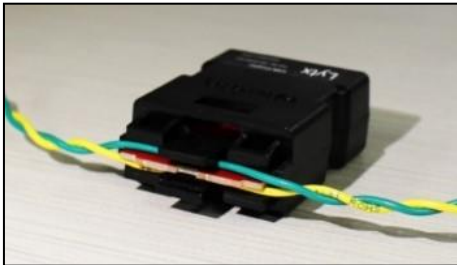
You may connect to the vehicle J1939 network with the CAN Coupler or with a diagnostic port Y-cable. This device uses inductive technology to allow the event recorder to read the data on the J1939 network without any puncture, cut, or splice into the vehicle cabling.

Refer to the J1939 9-pin diagram for the following steps.

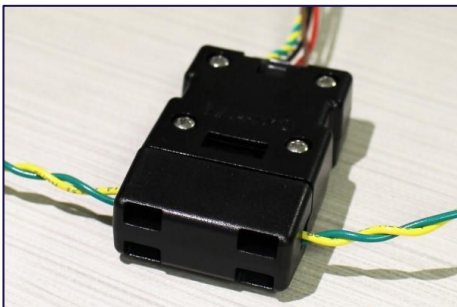
1. Connect the CAN Coupler to the Device Power Cable.
2. Find a suitable location along the vehicle J1939 network backbone to insert the CAN Coupler. The CAN Coupler MUST be installed in the vehicle cab. It cannot be exposed to moisture or inclement weather conditions.



3. Untwist approximately 2 inches (5 cm) of the vehicle's J1939 wires, which are always a green and yellow twisted pair.
4. Insert the vehicle's J1939 wires into the CAN Coupler with the yellow wire on the CAN-HI (Y) side and the green wire on the CAN-LO (G) side. Ensure that the wires are secured in the tabs provided and properly oriented.



5. Place the cap on the CAN coupler.





Connect Turn Signals (ER-SF300/ER-SF400 + J1939 only)

If you're installing an ER-SF300, ER-SF300W, or ER-SF400 device with a J1939 network connection, you may need to hard-wire turn signal inputs.

Typically, turn signal inputs can be detected by connecting to the J1939 vehicle network. However, in some vehicles (e.g. Kenworth), these inputs cannot be detected from the vehicle network. In these vehicles, you must hard-wire these inputs.

If you've connected to the J1939 vehicle network but you cannot detect turn signal inputs in the Lytx Installation Center, use the instructions below.

Before You Begin

Refer to the manufacturer-specific connection guide for possible locations to find turn signal inputs.

1. If the left turn signal can't be detected over the vehicle network, connect one of the remaining input wires on the Vehicle Interface Cable to the left turn signal input. Typically, the white wire is used.
2. If the right turn signal can't be detected over the vehicle network, connect one of the remaining input wires on the cable to the right turn signal input. Typically, the purple wire is used.
3. Cap off and coil any unused wires.
4. Using a voltmeter/multimeter, test the connections.

For turn signals, the input must cycle between 0V and 12V/24V when activated. CAUTION: Make sure 12V/24V is only shown when the turn signals are on, NOT when the parking brake or brakes are engaged/disengaged.

Route the Device Power Cable

WARNING: Make certain that neither the cable nor your installation activities interfere with any airbag-related mechanisms or otherwise risks affecting airbag deployment. Consult the vehicle manufacturer for the location of any airbag sensors and systems and restrictions that may apply.

CAUTION: Before proceeding, you may need to remove the window and door trim to route the cable underneath. These typically snap on and off using special clips. In vehicles with side and curtain airbags, the clips are often one-time use and may need to be replaced after removal. Please refer to the vehicle service manual for information.

1. Route the end of the power cable from the connection points to the device, securing the cable at least every foot and behind panels where possible.

WARNING: Route the cable in a manner that protects it from damage.



2. Connect the event recorder connector to the event recorder. Place the Tamper Prevention Clip behind the connector and secure it using the T-8 screw. Loosen the screws to tilt the device so installation of the locking screw is easier.



3. Make sure the cable is clear of any sharp edges, moving parts, and cannot get pinched in the door jamb.
4. Make sure the cable is tucked away and secured so that it cannot come loose. Lytx recommends using cable-ties at least every foot along the route of the cable to secure it.

Register the Device and Complete Installation

CAUTION: For any SF-Series device installations with Hubs or any SF300W devices, register the device using the Lytx Installation Tool instead of the Lytx Installation Center. This must be installed on a Windows laptop. Consult with the client's installation team on this.

Prior to Registration: To register the device, you must obtain credentials to the Lytx Installation Center from the client's installation team.

1. Using a mobile phone or tablet, go to: <https://lytx.force.com/Installations/s/>
2. Log in and complete the steps to register the device to your account.

Setting Up Wi-Fi Access (ER-SF300W Only)

Lytx DriveCam ER-SF300W event recorders are non-cellular, Wi-Fi only devices. They're designed to transmit data only when they're connected to an existing, external Wi-Fi network.

If you're installing an ER-SF300W device, you must set it up to connect to the desired Wi-Fi network. This must be done using the Lytx Installation Tool.

In the Lytx Installation Tool, you may set up Wi-Fi access while finalizing an installation. Or you may set it up after the fact by selecting 'Configure Wi-Fi Access' directly from the Menu.



To set up access, enter the Wi-Fi credentials and press Save. If you're installing the device for a client, obtain the Wi-Fi credentials from the client first.

Complete Installation

1. Finalize all electrical connections. Use cable-ties to bundle and secure all wires.
2. Replace any trim pieces on the door pillar and dash that were removed.
3. Make sure the cable is routed safely and cannot get pinched in any moving parts.
4. Reaffirm you have taken the appropriate safety precautions while working around vehicle airbags.
5. Keep this guide in a safe place for future use.

Conduct Final Checks

After installation of the SF-Series device but **prior to any operation of the vehicle, check all vehicle system lights, signals, and any other devices** (such as electronic log devices systems or CB radios) to make sure they are working properly.

Minimum checks should include the following (consult the vehicle manufacturer's service manual for additional checks that must occur):

1. **Constant power:** Ensure the event recorder is powered when the ignition is off (12V/24V to red wire).
2. **Switched power:** Confirm 12V/24V to the brown wire when the ignition is on.
3. **Ground:** Ensure the black wire is connected to a solid grounding point in the vehicle with no paint or rust.
4. **Event creation:** Turn the vehicle on and press either blue button on the event recorder. Confirm an event is created by verifying the LED's light up green from left to right, one by one.



5. **Manually upload events to Lytx:**
 - a. Press and hold one of the blue buttons on the device. The center LED light starts green, disappears, and then re-appears green. Let go when it re-appears.
 - b. If upload is successful, all LED status lights will light up one-by-one from left to right, each light going from blinking to solid green.
 - c. If upload is unsuccessful (i.e. you receive a different LED status light pattern), the upload must be attempted again. There are some instances where upload is not possible due to cellular coverage and the installation is still okay. After success or failure, the center LED light turns green.
6. Turn the ignition on and let the vehicle run for 5 minutes. While holding the brake, cycle the transmission to Drive, then Reverse and then back to Park. Verify that there are no new error codes or Check Engine lights.
7. Test the other vehicle components on the power circuit of the SF-Series device to confirm their functionality, especially if the circuit is shared.
8. Verify and diagnose all active faults in the vehicle system, other devices, and the SF-Series device prior to completing the installation.
9. Place the driver safety card and the warning card included with the event recorder packaging on the driver's seat.
10. Place the decal indicating the vehicle is equipped with a recording device on the driver's seat. The customer is responsible for visibly displaying this decal.

Installation of Optional Parts

This section provides installation instructions for optional parts. Installation of the following parts are covered in this section:

- Overhead Mounting Bracket
- Extended Mounting Arm
- Remote Push Button

Overhead Mounting Bracket Installation Procedures

The optional **Overhead Mounting Bracket** allows you to mount the event recorder from the ceiling or bulkhead above the vehicle windshield.

This may be used if either:

- The recommended Standard Mounting Bracket is not feasible in the specific vehicle; OR
- Windshield mounting is restricted in the jurisdiction.



Materials

Provided:

- Overhead Mounting Bracket
- Screws

NOT provided: Drill

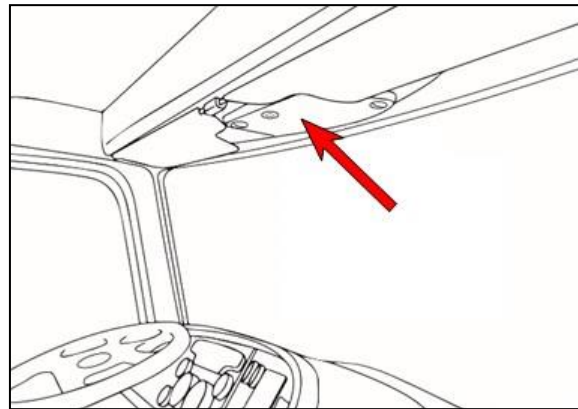
Attach the Overhead Mounting Bracket and Event Recorder

Mounting Location Warnings

When selecting the mounting location, heed the following warnings:

- Follow the guidelines specified in the section, "[Review Mounting Location Guidelines](#)".
- Check that the mounting surface can be safely drilled. Do not drill or screw into wires or other components.
- Check that nothing blocks the interior- or exterior-facing lenses. Objects such as large sun visors, window tint, and circulation fans may block the lenses.

1. Attach the event recorder to the Overhead Mounting Bracket using the Torx screws. However, keep the screws loosened so the event recorder can rotate in the bracket.
2. Find a suitable mounting location in the ceiling or bulkhead. Position the assembly as close to the windshield and center of the vehicle as possible.
 - a. Make sure the event recorder does not block the driver's view of the road.
 - b. Make sure the exterior-facing lens has a clear view out the windshield. Turn on the wiper blades to be sure the lens is in the path of the wiper blades.
 - c. Make sure the interior-facing lens cannot be blocked by any nearby objects. Rotate mirrors, sun visors, and other objects, if necessary.
 - d. Make sure the mounting surface is solid, can be safely drilled, and the bracket attached securely with screws.
3. Mark the position of the bracket and pre-drill the screw holes. Be careful not to drill or screw into wires or other components.
4. Detach the event recorder from the bracket.
5. Screw the bracket into the marked position.
6. Re-attach the event recorder into the bracket. Adjust the event recorder so it hangs vertically (plumb). Then, secure it fully in the bracket.



After you've finished installation of the Overhead Mounting Bracket, proceed to [Connect Electrical Wiring](#).

Extended Mounting Arm Installation

The optional **Extended Mounting Arm ("Mounting Arm")** provides greater flexibility for device placement when windshield mounting is not available/possible. The Mounting Arm allows you to install the device on the dashboard, the ceiling, or the bulkhead.

However, the Mounting Arm is less stable than either the Standard Mounting Bracket or the Overhead Mounting Bracket. **The Mounting Arm should therefore only be installed if neither the Standard Mounting Bracket nor the Overhead Mounting Bracket are feasible options for installation.**

Materials

Provided: Extended Mounting Arm

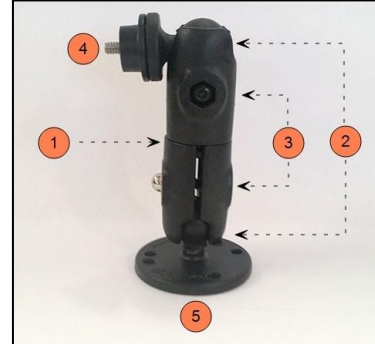
NOT provided:

- Four (4) #10 screws (Screw length may vary by vehicle but must be long enough to ensure a secure mount.)
- Screwdriver
- T-27 security Torx bit
- Zip-ties
- Pen OR pencil

Mounting Arm Overview

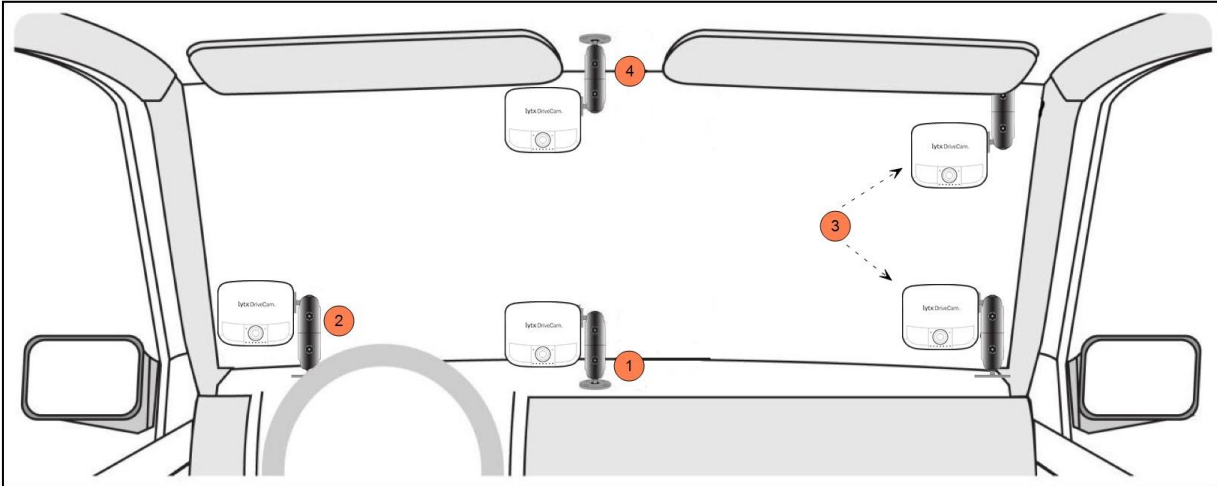
The Mounting Arm may be mounted in a variety of locations due to its versatile design comprised of rotating bracket casing and pivoting balls and sockets.

1. Rotating bracket casing
2. Pivoting balls and sockets
3. Torx adjustment screws
4. Cap and device attachment screw
5. Base (detachable)



Alternative Mounting Locations

The following are alternative mounting locations for the Mounting Arm. Please select the best location based on the particular vehicle and the mounting location guidelines set forth in the section, [Error! Reference source not found.](#)



1. **Center dashboard**
2. **Lower corner, driver side dashboard**
3. **Upper or lower corners, passenger side**

Note: If the event recorder is installed in a location outside of the comfortable reach of the seated driver, the Remote Push Button should be installed as well to allow the driver to manually record an event.

For details on installing the Remote Push Button, refer to the section, Remote Push Button Installation .

4. **Center overhead (ceiling or bulkhead)**

You should only use the Mounting Arm in this location if use of the Overhead Mounting Bracket is not feasible.

Mounting Arm Installation Instructions

WARNING: Do not extend the Mounting Arm's length beyond its intended design. This causes instability, which may result in excessive "non-events" being recorded.

WARNING: The Mounting Arm must be oriented vertically (straight up or down) for adequate stability.

WARNING: When selecting the mounting location, check that the mounting surface can be safely drilled. Do not drill or screw into wires or other components behind the mounting surface that can be damaged.

CAUTION: When selecting the mounting location, check that nothing blocks the interior- or exterior-facing lenses. Objects such as large sun visors, window tint, and circulation fans may block one of the lenses and should be avoided. Also check that the device does not block the driver's line of sight in the selected mounting location.

1. Using the T-27 security Torx bit, loosen the Torx adjustment screws on the Mounting Arm until the balls can pivot freely in the sockets and the two halves of the bracket casing can be rotated.
2. Screw the Mounting Arm's device attachment screw into the **right side of the event recorder**.
3. Find a suitable mounting location. Pivot/rotate the Mounting Arm and position it in various locations within the vehicle to determine the best placement. The Mounting Arm must be oriented vertically (straight up or down) for adequate stability.
4. When you have found the best location, mark the position of the base and the screw holes with a pen or pencil. At least 4 screws must be used in opposite corners of the base (shown on right).
5. Detach the base from the Mounting Arm. Loosen the adjustment screw enough so the ball can be pulled from the lower socket.
6. Attach the base securely to the marked position. Pre-drill the screw holes. Then screw the base into the marked position.
7. Re-attach the Mounting Arm to the base.
8. Pivot/rotate the assembly until the event recorder is in the desired position. Then tighten the screws. Make sure the assembly is firmly secured.
9. The Device Power Cable must be secured to the Mounting Arm with zip-ties.



After you've finished installation of the Mounting Arm, proceed to Connect Electrical Wiring.

Remote Push Button Installation

The optional **Remote Push Button** allows drivers to manually record events using a push-button switch mounted in an easy-to-reach location, such as the dashboard. This is useful for drivers of larger vehicles in which the SF-Series event recorder is positioned out of reach of the driver's seat, preventing them from easily pushing one of the manual record buttons on the event recorder when seated in the driver's seat.

Installation of the Remote Push Button contains the following subsections:

1. Mount the Remote Push Button
2. Assign the Input in the Lytx Installation Tool

Materials

Provided:

- Remote Push Button

NOT provided: Hole saw or stepped cone cutter



Remote Push Button Installation

1. Find a suitable mounting location for the button:
 - a. Standard size: The location must be within a fixed panel with space for a 0.75-inch hole. There must be 2.75 inches of clearance behind the panel.
 - b. The location should allow the driver to easily push the button while seated in the driver's seat.
 - c. The button should not be placed where the driver may accidentally push the button.
2. Using a hole saw/stepped cone cutter, drill a hole into the panel.
3. Bring the Remote Push Button assembly through the hole and connect it to the Vehicle Interface Cable/Non-ECM, Device Power Only Cable. Refer to the Electrical Connection Overview .
4. Mount the button into the hole. Secure it from the inside with the hex nut.
5. During device registration (<https://lytx.force.com/Installations/s/>), indicate that a Remote Push Button has been installed and follow the prompts.



Maintenance & Troubleshooting

THE DEVICE SHOULD BE INSTALLED AND MAINTAINED BY QUALIFIED TECHNICIANS. Only a properly qualified technician should install and maintain the SF-Series device(s). Any electrical work should be performed only by an MECP-certified or equivalent technician with an expertise in installing and troubleshooting advanced vehicle onboard components including multiplexed circuits. Lytx, Inc. disclaims all responsibility for any damages arising from improper installation and maintenance of the SF-Series device(s).

Maintenance

After installation has been completed, Lytx recommends inspection and maintenance be performed every time normal preventative maintenance is performed on the vehicle and anytime the Lytx Vehicle Event Recorder or its wiring and electrical connections are moved, re-installed, or otherwise altered from their initial installation.

Take these steps:

1. **Visually inspect all electrical cables for pinches, fraying or wear.** Electrical cables that are pinched or frayed may be found on vehicles where the electrical connection was incorrectly installed. Further, cables and wires may become worn or exposed over time due to contact with sharp edges or objects and when impacted by other electronic work, mechanical work, or installations. If any actual or potential cable/wire damage is detected, necessary repairs should be performed, potentially including re-installation of the SF-Series device.
2. **Visually inspect all electrical connections to ensure they are fully secured.** Electrical connections may not be fully secured if the connection was incorrectly installed. They may also be loosened when impacted by other electrical work, mechanical work, or installations.
3. **Visually inspect all wire and wire terminations to ensure they are proper and undamaged.** Ensure that all wiring is undamaged and that all wire terminations are in conformance with the suggestions set forth in Wiring and Termination Suggestions.

Troubleshooting Installation Issues

To troubleshoot installation issues, follow steps provided in the Lytx Installation Center while registering the device: <https://lytx.force.com/Installations/s/>

(If you're using the Lytx Installation Tool instead, follow troubleshooting provided directly in the application.)

If you're having difficulty troubleshooting or problems persist after taking the recommended steps, please contact the Lytx Technical Support Center at 925.732.4246 or email support@lytx.com.

Troubleshooting Issues After Installation

Lytx event recorders have built-in diagnostic tools to help troubleshoot issues you may experience. If you're having issues with the SF-Series event recorder, initiate the device's Diagnostic Mode. In this mode, the device's LED status lights will help identify the specific component of the device that may be causing the issue.

This section provides instructions on how to initiate the Diagnostic Mode, definitions of each of the device's LED status lights, and steps for troubleshooting.

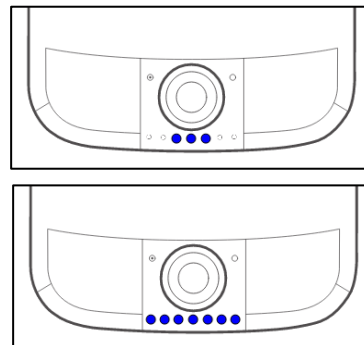
To initiate the Diagnostic Mode, the device must be rebooted. After the reboot sequence is finished, the device will enter the Diagnostic Mode.

Note: The device may be rebooted a maximum of 7 times in a 24-hour period.

Initiate Diagnostic Mode

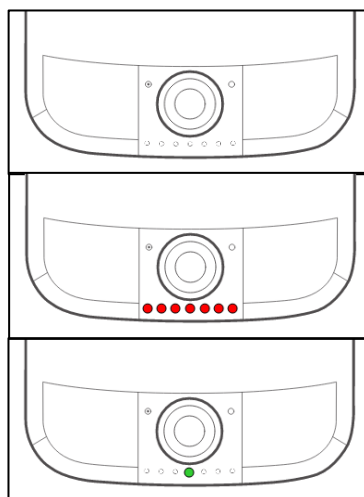
To initiate the Diagnostic Mode on the SF-Series device, you must first reboot the device. To reboot the SF-Series device, follow these steps:

1. Press and hold either of the blue manual record buttons on the device until the 3 center LED status lights turn blue (hold for about 30 seconds). After they light up, let go of the button.
2. Immediately press and hold the manual record button again for up to 45 more seconds until all 7 LED status lights turn blue. After they light up, let go of the button. At this point, the SF-Series will begin rebooting.



LED Status Light Sequence: Reboot

1. As the device shuts down, all LED status lights will shut off.
2. As it starts back up, the center LED status light will turn green.
3. Once the device has fully restarted, it will enter Diagnostic Mode. To start, all LED status lights will turn red.

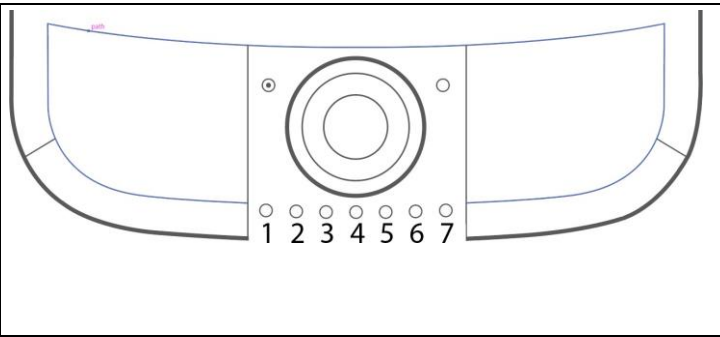


Troubleshooting in Diagnostic Mode

Diagnostic Mode reveals issues with the SF-Series and ER-SV2 devices. Each of the LED status lights provides the status of a different component of the device as shown below.

Please note:

- All LED status lights will turn red to start. Each LED will turn green when/if the corresponding feature is confirmed as working properly.
- In Diagnostic Mode, the LED status lights will not turn any colors other than green or red. (Except for LED 2, which may also turn yellow). The device will stay in Diagnostic Mode for 4 minutes. Pay attention to the LED status lights during this time.

	Color	Status
	Green ●	OK
	Red ●	Error – Requires troubleshooting
	(For LED 2 only) Yellow ●	Error – Requires troubleshooting
	(For LED 6, 7 only) Red ●/Green ●	Testing turn signal – Please wait

LED	Component	Troubleshooting Steps
1	Vehicle ignition	If the engine is already turned on, turn the engine off and then back on. Wait about 10 seconds for the ignition to be detected.
		There may be an issue with the ignition connection (brown wire). Check the wire for damage. Gauge the wire with a voltmeter for 12V/24V with the ignition on. Check the vehicle fuse for that circuit.
2	GPS	The device may be in an area with poor reception. Try re-locating to a different area and re-testing the signal.
3	Cellular signal	Wait for the device to exit Diagnostic Mode (up to 5 minutes).
		Perform a forced check-in: Hold one of the blue buttons for 10 seconds. Verify the LED light pattern. The lights will light up and blink green one by-one from the left to right until all are lit, indicating the check-in was successful.
		The device may be in an area with poor reception. Try re-locating to a different area and re-testing the signal.
4	Vehicle network data (ECM) (Only for installations including vehicle network connections)	Start the vehicle. Ensure the vehicle is running.
		J1939 Connections: The wires may be reversed over the CAN Coupler. Ensure that the Yellow wire is on the CAN_HI (Y) side of the Coupler and the Green wire is on the CAN_LO (G) side.
		J1939 Connections: Ensure that the CAN Coupler connector is fully engaged.
		J1939 Connections: The CAN Coupler may not have been placed on the J1939 backbone but on a stub. Try moving the Coupler to a different location.
		OBD-II Connections: Check that all cable connections are fully secured. This goes from the Device Power Cable to the OBD-II Cable to the vehicle OBD-II port.
5	Brakes	(Standard) If brakes are read from the vehicle network (ECM), follow troubleshooting steps for the ECM connection (above).
6	Left turn signal	Verify that the Left Turn Signal is properly assigned in the Lytx Installation Center.
		For hard-wired turn signals, check the connection point and inspect the corresponding wiring for cuts or damage.
7	Right turn signal	Verify that the Right Turn Signal is properly assigned in the Lytx Installation Center.
		For hard-wired turn signals, check the connection point and inspect the corresponding wiring for cuts or damage.

Uninstalling the Device

If you must uninstall the device for any reason, follow the guidance and instructions below.

EXPLOSION HAZARD: Do not disconnect equipment unless power has been removed and the area is known to be non-hazardous.

WARNING: Make certain that neither the cable nor your installation activities interferes with any airbag-related mechanisms or otherwise risks affecting airbag deployment. Consult the vehicle manufacturer for the location of any airbag sensors and systems and restrictions that may apply.

CAUTION: Before proceeding, you may need to remove the window and door trim to remove the cable underneath. These typically snap on and off using special clips. In vehicles with side and curtain airbags, the clips are often one-time use and may need to be replaced after removal. Please refer to the vehicle service manual for information.

CAUTION: Do not try to pull or pry the bracket off the windshield. Doing so may cause damage to the windshield.

Materials

- Torx wrench OR screwdriver with T-27 and T-8 Torx bits
- 3M Tape Removal Tool OR a broad, very thin putty knife
- WD-40 OR a similar lubricant

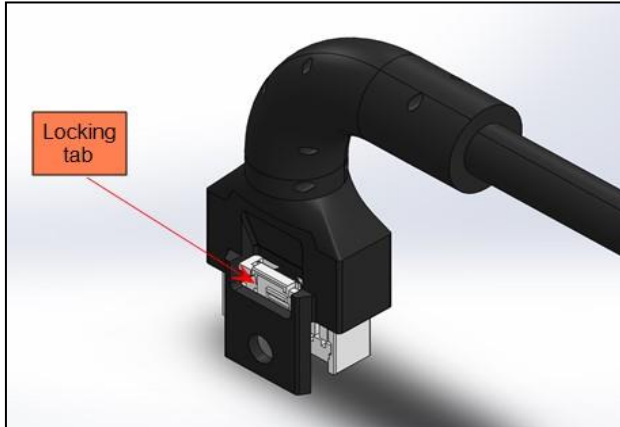
Instructions

Before you begin, review the [Electrical Connection Overview](#) for a summary of the existing installation.

1. Turn off the vehicle ignition and remove the key.
2. Remove the screws on each side of the device. Detach the device from the bracket.
3. Remove the security screw and the Tamper Prevention Clip on the back.



4. Push in the locking tab on the power cable and disconnect. Note that failure to push in the locking tab may cause damage to the device.



5. Using the 3M Tape Removal Tool or putty knife, apply a small amount of WD-40/lubricant to both sides of the blade. Carefully remove the bracket from the windshield.
6. Carefully remove the power cable and wiring harness, which are tucked behind different interior panels. Remove any panels, as needed. (Typically, the cable and harness run underneath the headliner and down the A-pillar.)

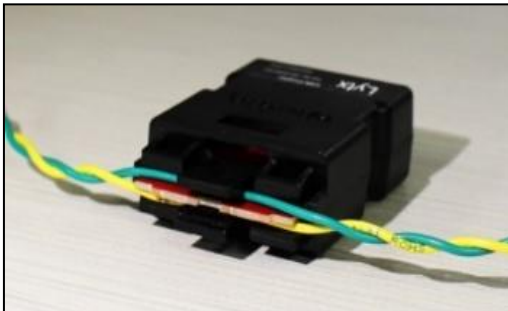
WARNING: Be very careful working around vehicle airbags. Please refer to the vehicle's service manual for information.

7. Locate the existing connection points in the vehicle fuse panel. Follow the path of the harness or consult the vehicle manufacturer's manual to find the fuse panel. (Typically, the panel is located underneath the dashboard on the driver's or passenger's side.)
8. Disconnect all wires from their connection points. Return the connection points to their original factory condition or restore them so they are secure and may be used again in the future.

For more detail on the connection points, refer to the Electrical Connection Overview and subsequent sections.

WARNING: Do not leave any exposed wire near connectors.

9. If the harness is connected to an optional CAN Coupler, remove the cap on the CAN Coupler. Remove the wires inside.





Contact Technical Support

For troubleshooting support, please contact the Lytx Technical Support Center at 925.732.4246 or email support@lytx.com.

Installation Support Hours:

- Monday - Friday: 7am - 8pm EST
- Saturday - Sunday: 8am - 6pm EST