

X LIFTER

World's first
Air-suspension controller with self-levelling
for selected Land Rover® vehicles



Installation guide (Defender 110 L663) Model X2 New Generation, Firmware 2.01

Table of contents:

1. Legal disclaimer	2
2. Safety information	2
3. XLifter EAS unit installation	3
3.1. Package Contents	3
3.2. Installation – general description and overview	3
3.3. XLifter EAS Unit Installation – Defender 110 L663	4
Step 1: Disconnect the battery (see vehicle manual)	4
Step 2: Remove the right loadspace trim panel	5
Step 3: Install XLifter EAS unit.	7
Step 4: Install XLifter cable loom and connect XL EAS unit.	8
Step 5: Install compressor temperature lead (optional)	10
Step 6: Finish the XL EAS unit installation.	12
4. Control module quick start and calibration.	12
4.1. Control module quick check.	13
4.2. Select vehicle type and calibrate XLifter.	13
5. Removing XLifter from the vehicle.	17
6. Wrapping up and next steps.	17
7. Troubleshooting	18
8. Contacts and support	18

Congratulations on your XLifter purchase!

Welcome to the installation of your XLifter, the Swiss Army knife for your vehicle's air suspension. This guide provides step-by-step instructions and essential safety tips for a smooth setup. Read it carefully to get the most from XLifter and ensure a safe and successful installation.

Your adventure with enhanced suspension control begins here.

Thank you for trusting XLifter.

1. Legal disclaimer

You are provided with XLifter, an air-suspension controller designed for Land Rover vehicles ("the **device**" or "**XLifter**"). XLifter enables the adjustment of the vehicle's air-suspension system and its electronic programming.

Please note that XLifter is an aftermarket product **not officially approved for vehicles on public roads** as per Act no. 361/2000 Coll, as amended. **Its use on public roads or in any context deemed unauthorized by local regulations, whether in the Czech Republic or elsewhere, is at the user's discretion.** The manufacturer bears no liability for compliance with road operation technical requirements under Act No. 56/2001 Coll and regulation no. 341/2014 Coll.

Installation and use of XLifter may affect the warranty of your vehicle's air suspension subsystem components or the vehicle's warranty as a whole. It is the user's responsibility to consult with the local dealership or warranty provider regarding the potential impact of XLifter on the vehicle's warranty. Evaluating the risk of warranty impact is solely up to the user. The manufacturer bears no liability for any warranty issues that may arise as a result of using XLifter.

By installing XLifter, the user releases the manufacturer from any liability related to the product's impact on other vehicle systems, whether mechanical or electronic. **The device is intended for controlled conditions, such as low-speed operations and off-road use, and should be used with caution.**

Users also accept the responsibility to inform any future owners of the vehicle about the installation of XLifter and its intended use.

By proceeding with the installation of XLifter, you acknowledge and agree to the terms outlined above. XLifter is recommended for off-road use only and not for operation on public roads.

2. Safety information

This guide is essential for the safe installation and use of XLifter. Follow these instructions for safe installation and operation. Please ensure installation is performed by or under the supervision of a person familiar with this guide.

Understanding Safety Symbols:

- ⚠ This symbol signifies potential warnings, hazards, or unsafe practices. When accompanied by the word "warning," it highlights situations where disregarding instructions could lead to injury or damage to the vehicle or its systems. Please read any text associated with this symbol and follow the provided instructions to mitigate risks.

General installation warnings:

- ⚠ **Battery Considerations:** While disconnecting the battery is a recommended precaution, be aware that it may introduce complexities such as the need for recalibration of certain vehicle systems. Following this installation guide allows for safe installation without necessarily disconnecting the battery, provided that caution is exercised.
- ⚠ **Handling Vehicle Components:** Take extra care when removing or installing trim panels and other vehicle components to avoid damaging clips or loosening connections. Apply force carefully to prevent breakage.
- ⚠ **Securing Electrical Connections:** Make sure all connectors and their locks are securely fastened. Improper or loose connections may cause unanticipated malfunctions or potential damage to the vehicle's electrical system.
- ⚠ **Sale of Vehicle:** Inform any new owner that XLifter is installed and provide them with this manual, ensuring it remains with the vehicle for reference.
- ⚠ **Before installation:** Thoroughly review the XLifter user guide to familiarize yourself with its features and safety instructions.

3. XLifter EAS unit installation

3.1. Package Contents

1x XLifter EAS unit with 3M fasteners	1x Cable harness with the bypass plug
1x Extra 3M fastener	1x Compressor temperature lead
1x XLifter control module + Velcro strip	1x Protective tube for temperature lead
1x XLifter sticker	1x Quick splice connector
1x Installation manual	1x User manual

3.2. Installation – general description and overview

The XLifter device consists of two main components: the control module and the XLifter EAS installation unit (where EAS stands for Electronic Air Suspension). The control module, a display unit with buttons, is used to manage all settings and inform the user of the operating status. The EAS unit is responsible for adjusting the wheel height sensor signals and vehicle tilt measurements. Communication between the control module and the EAS unit is wireless.

The control module can be placed anywhere inside the vehicle that allows easy access, according to user preference. It needs to be connected to a switched 12V power supply, such as a cigarette lighter socket. Advanced users can cut off the power connector and wire the cable directly to an appropriate 12V connection point or use a custom power harness in selected vehicles (available separately). Concealing all cables gives a neater installation and keeps the lighter socket free for other uses.

There is a range of 3D printable mounting frames at <https://www.xlifter.com/xlifter-accessories/>

The XLifter EAS unit is installed close to the original air suspension control module, referred to as the Chassis Control Module (CHCM) in the latest generation vehicles. Both units are connected via the supplied cable harness. After installation, the XLifter EAS unit is mechanically secured to the vehicle's body and functions as an accurate tilt sensor.

Before installation, watch the XLifter installation video and review the FAQ:

The video guide is available on XLifter's YouTube channel - https://youtu.be/RmIpq_Ll6tE
www.xlifter.com/installation/ contains the video guides and installation hints (planned for 4Q 2027)

<https://www.xlifter.com/faq/> contains **the XLifter FAQ** (frequently asked questions).

Here's a quick installation overview:

- Install the XLifter EAS unit.
- Connect the cable harness.
- Connect the compressor temperature lead (optional).
- Plug the control module into a 12V socket.
- Set the vehicle type and run the calibration procedure.

3.3. XLifter EAS Unit Installation – Defender 110 L663



Accessing the LR Chassis Control Module (CHCM) in the L663 New Defender involves partially removing the right loadspace trim panel, which is not particularly straightforward. We recommend having XLifter installed by qualified personnel or at an LR workshop for best results.

Estimated installation time:

- The installation of the XLifter EAS unit typically takes about 1 hour for someone experienced and 2+ hours for a first-timer.

Tools required:

- Small Phillips screwdriver (PH1)
- Allen key H6, Torx 30
- Plastic rivet/trim clip removal tool
- Slip-joint pliers to crimp the splice connector.
- Flashlight for the installation area.



The Chassis Control Module (CHCM) is situated inside the rear right side of the vehicle body, just ahead of the rear junction fuse box. If you have access to the LR documentation, refer to 60.50.04 Air suspension control module removal and installation, and the associated procedures.

Step 1: Disconnect the battery (see vehicle manual)

(Alternatively, remove fuses 55R and 56R before fitting the cable loom)



Battery disconnection and reconnection can be a complex procedure. Upon reconnection, resetting the electric window one-touch function and recalibrating the electric parking brake and tailgate may be required. If the vehicle has a stolen vehicle tracking system, put it into service mode before disconnection and take it out of service mode after reconnecting the battery. Please refer to the relevant Land Rover documentation/user manual – BATTERY AND CHARGING SYSTEM – GENERAL INFORMATION 414-00.

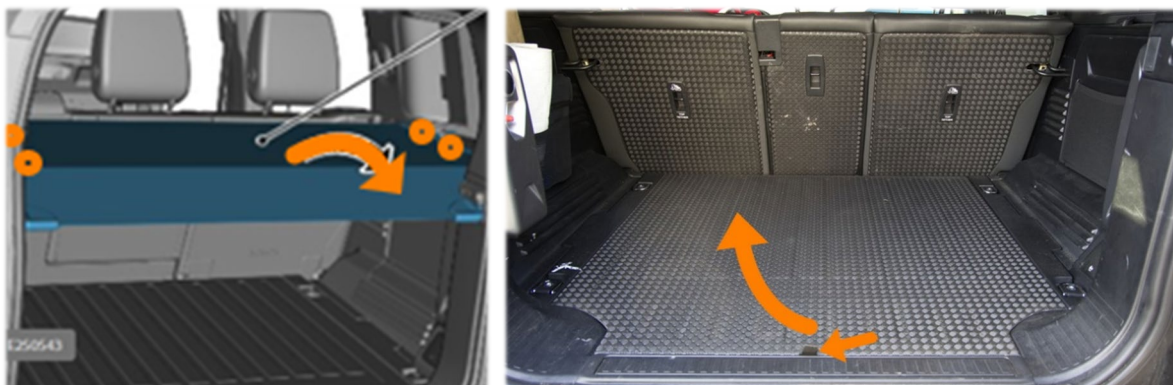


Alternatively, install the XLifter EAS unit without disconnecting the battery. Follow the procedure precisely: power down the vehicle (ignition, infotainment, etc. off) and remove **fuses 55R and 56R from the loadspace fuse box before fitting the cable loom!** Otherwise, microscopic sparking when connecting the plugs may degrade the contacts and reduce connection reliability.

Step 2: Remove the right loadspace trim panel

To access the Chassis Control Module (CHCM) in a new Defender, partially remove the rear right loadspace trim panel. This is quite an involved process, so take your time.

a) Remove the loadspace cover (if fitted) and loadspace floor trim.



b) Remove the rear junction fuse box cover.

c) Remove the 220V socket cover (if fitted).

- It is held by two clips, one at the top and one at the bottom.



d) Remove the loadspace lower side trim.

- Use an H6 Allen key, Torx T30, PH1 Phillips screwdriver and trim clip removal tool to release the fixings.



e) Remove the loadspace treadplate.

- Remove 2 bolts (Torx T30)
- Pull the treadplate upwards to release four clips.



f) Remove two plastic retainer clips.

- Ensure you have the correctly sized Phillips head bit to prevent damage to the head. Unscrew the central screw using minimal downward force. Once the screw head is out, use a suitable tool to simultaneously pull the head upwards while continuing to unscrew it.



g) Unscrew the bolt under the coat hook.

- Tilt the hook out and remove it by pulling upwards as shown.
- Remove the bolt (T25)



h) Release the rear and middle sections of the loadspace panel.

- Pull the rear upper end of the loadspace panel out to release two clips. One clips into the upper D-pillar trim. It helps to push the upper trim towards the vehicle body while pulling the loadspace panel out.
- Pull out the rear lower section of the loadspace panel to release two more clips.
- Disconnect the electrical connector(s) at the rear (loadspace light).
- Pull the middle section of the loadspace panel out to release two more clips.
- The loadspace panel should flex enough to allow access to the Chassis Control Module (CHCM) / air suspension control module.



Step 3: Install XLifter EAS unit.

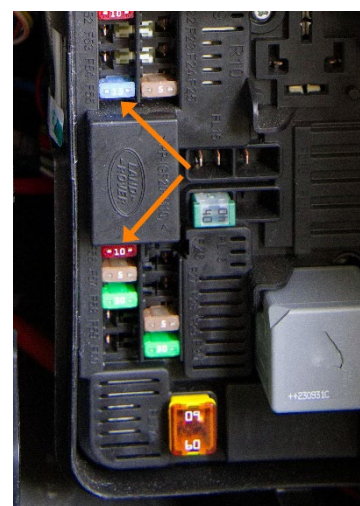
- The ideal place for the XLifter EAS unit is next to the junction box, above the rear light access opening, as shown below. This allows at least partial access after all trim panels are refitted. You will be able to see the EAS unit LED and disconnect and bypass the unit if needed.
 - Position the EAS unit as shown, with the connector pointing downwards and the engraved side facing the front of the vehicle. The inclinometer axes are configured for this orientation.
 - You can complete steps 3 and 4 in either order. Installing the XL EAS unit first seems easier because you can connect the XL cable loom as soon as it is installed.
- a) If a hose or duct occupies this space, as shown (some early 2020 models), move it to the left to make room for the XL EAS unit. Those stickers are hard to remove, so now is the time for some spicy language.
 - b) Remove dust and grease from the mounting surface using a cleaner such as isopropyl alcohol. Secure mounting is crucial because the XL EAS unit contains the inclinometer.
 - c) Take the extra 3M fastener supplied, peel off the protective backing from one side, and attach it to the centre of the EAS unit mounting face.
 - d) Remove the remaining 3M protective backing and press the XL EAS unit firmly onto the metal as shown. Position it as high and as far left as practical, on a flat area so that the 3M fasteners adhere fully. Apply firm pressure to secure it.



Step 4: Install XLifter cable loom and connect XL EAS unit.

a) If the battery wasn't disconnected:

- Put the vehicle into "sleep" mode: step out, close all doors and lock it with the remote key. Wait until the ignition and infotainment screens are off.
- Unlock the tailgate with the remote key. This will not wake up the vehicle.
- Open the tailgate and remove **fuses 55 (15Amp) and 56 (10Amp) from the loadspace fuse box**. This is essential: connecting plugs while the CHCM is powered causes sparking and contact damage, leading to unreliable connections and intermittent faults. Such faults are not covered by the XLifter warranty.



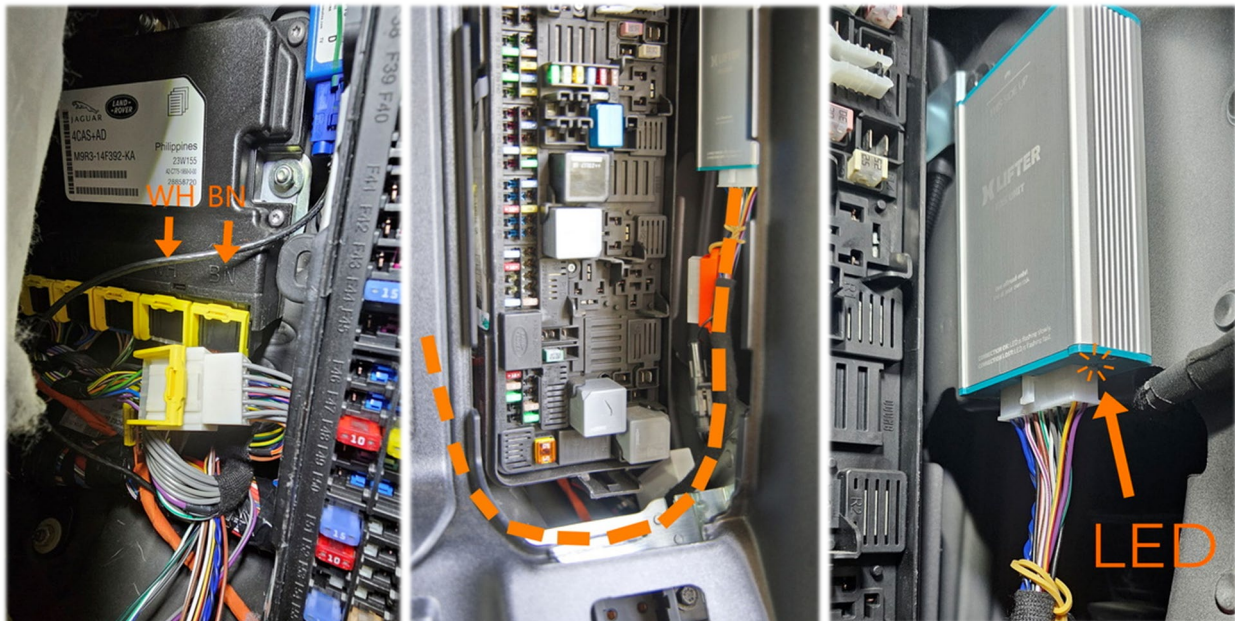
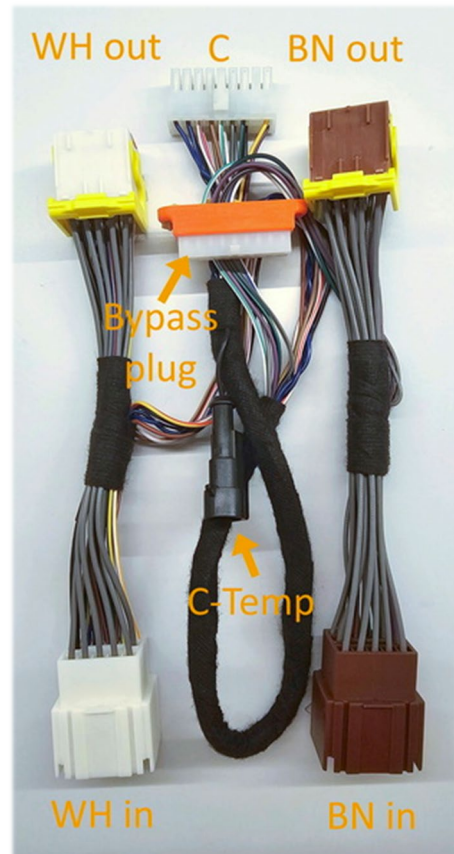
b) Unplug the two rearmost connectors from the LR CHCM module:

- These connectors, located nearest to the junction box, are colour-coded white (WH) and brown (BN).
- With a small flat screwdriver, unclip the two yellow levers, push the levers down to unlock, and then pull the connectors downward to detach.



c) Install the XLifter cable loom.

- Connect the XLifter loom to the LR CHCM: match the white (WH) plug to the WH slot and the brown (BN) plug to the BN slot.
- Align and gently push each plug in from below. Its yellow lever will move as it enters. **Push the lever up until it clicks to lock the plug.**
- Connect the vehicle harness to the XLifter loom, white to white and brown to brown. **Ensure each latch clicks. If it does not, gently push the plugs together** and try again.
- Check that all connectors are fully inserted and their latches are locked. Never use cable ties or electrical tape to secure a loose latch. If a latch will not lock, the connectors are not fully seated.
- Tidy the cables so they do not protrude and obstruct refitting the loadspace panel.
- Route the long XL loom section (with connector C) below the junction box.



d) Connect the XLifter EAS unit.

- Plug the XLifter cable loom connector C into the XL EAS unit.
- Ensure the connector clicks into place. Gently tug on the plug, not the wires, to check it is secure. Check that all wires are seated and no pins are loose, then press the plug in firmly.
- Reinsert **fuses 55 (15Amp) and 56 (10Amp) into the loadspace fuse box.**
- Observe the EAS unit's LED; it should start blinking within 10 seconds of connecting the cable loom. The LED will turn off after 5 minutes if the vehicle is in "sleep" mode, which is normal. The LED will blink again once the ignition is on.

Step 5: Install compressor temperature lead (optional)

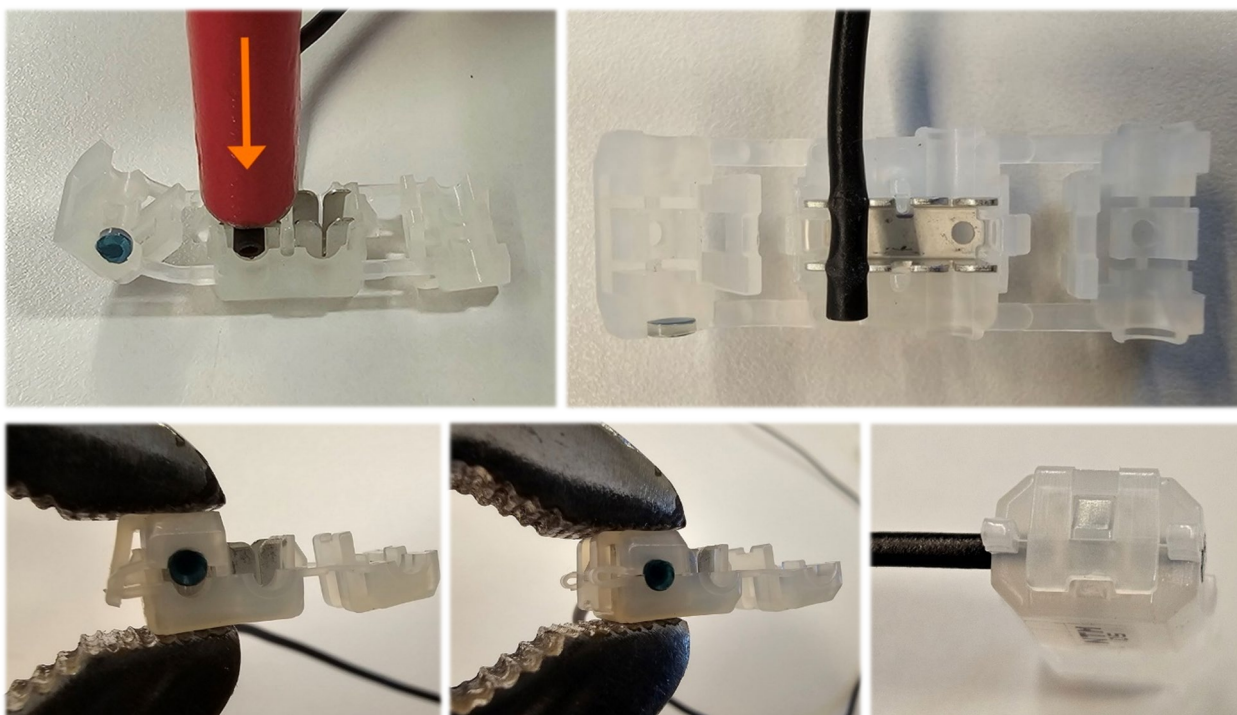
XLifter compressor temperature monitoring warns of overheating during frequent height adjustments. It also helps detect air suspension problems that cause prolonged compressor operation.

To enable this feature, connect the compressor temperature lead to the specified wire using the T-splice connector. This task is best done by a qualified automotive electrician. If unsure, skip this step and disable the feature in the XLifter service menu.

- a) Remove the shipping fasteners from the compressor temperature lead and straighten the tube. Pull the wire slightly out of the tube to ease installation.
- b) Feed the tube and wire through the cable channel to the compressor housing, with the bare wire end towards the compressor. The Superseal connector (black with yellow rubber) goes towards the XL EAS unit.



- c) Crimp the wire into the supplied quick splice connector.
 - Push the black wire near the Superseal connector into the protective tube. As you do, the other end will emerge; pull it slightly out.
 - One side of the splice connector has a closed end, marked with a green dot in the pictures below for clarity. Locate it and position the wire as shown. Push the wire partway in with a flat tool so it stays in place temporarily.
 - Use slip-joint pliers (water pump pliers or pliers wrench) to press the connector housing fully closed. Make sure the connector latch is fully engaged.
- ⚠ Do not use needle-nose pliers, as these work poorly. Only use pliers with parallel jaws!



- d)** At the rear centre of the loadspace, locate the smaller 4-wire connector on the compressor housing and disconnect it for better access. If needed, remove approximately 4 cm of black protective tape and find the **violet-grey wire**. Crimp this wire into the quick splice connector: insert it into the open slot, then close the housing securely with pliers, as in the previous step.



- e)** Connect the Superseal connector at the other end of the XL compressor lead to its mating connector on the XLifter cable loom near the XL EAS unit. Make sure the latch clicks fully into place!
- f)** Tidy everything up, reconnect the compressor 4-wire connector if still disconnected, and rewrap the protective tape.



Step 6: Finish the XL EAS unit installation.

Congratulations, the most challenging part is over. Before finishing, check that everything works correctly, tidy up, and refit all the trim panels.

It's a great idea to test the basic functionality of the XLifter system before you finish reassembling everything.

- a) Reconnect the vehicle battery as per the vehicle's user manual if it was disconnected.
- b) Turn on the ignition. Check the XLifter EAS unit green status LED; it should flash rapidly at 2x per second, signaling it's ready for operation and waiting for a wireless connection from the control module.
- c) Inspect the vehicle dashboard for any air suspension errors:
 - If the installation occurred without the vehicle being fully in "sleep" mode, a suspension error may appear.
 - To clear these errors, turn off the ignition and allow the car to "sleep" (lock it using the remote key - this will turn off the dashboard and infotainment display). Then, reopen the vehicle and turn on the ignition; all errors should clear.
 - If you have a diagnostic tool, check for height sensor signal errors from the CHCM module and clear them.
- d) Proceed to chapter 4.1 for a quick check of the Control Module. Follow the steps outlined there to ensure the controller connects to the XL EAS unit properly, the temperature readings are accurate, and no dashboard errors are present.
- e) Once everything is functioning smoothly, it's time to put all the trim pieces back:
 - Reattach all trims in the reverse order of removal.
 - Remember to reconnect the light connector at the rear of the loadspace panel.
 - Check the alignment of the clips before pressing them into place to avoid damaging them.
 - Where applicable, reinstall or adjust all aperture seals to their correct positions.

4. Control module quick start and calibration.

The control module draws power from an ignition-switched +12V source, such as a cigarette lighter socket, and communicates wirelessly with the XLifter EAS unit over a range of up to 10 metres. Any suitable 12V socket will work, particularly the one on the centre console just below the climate controls.

Attach the control module in your preferred location using the supplied Velcro, either now or later. For a neater setup, install the controller dashboard mounting kit (see chapter 5), or explore mounting frames for your vehicle at <https://www.xlifter.com/xlifter-accessories/>

4.1. Control module quick check.

Powering up and checking the control module:

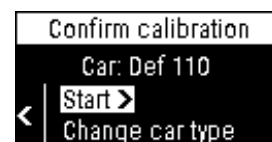
- Turn the ignition ON
- Plug the 12 V power plug into the cigarette lighter socket.
- You should see an animated logo and a wireless search indicator for the XLifter EAS unit on the control module's display.
- The control module and the XLifter EAS unit are pre-paired. Connection should occur within 10 seconds, but allow up to 20 seconds if the EAS unit, or vehicle battery, was just connected.
- Once connected, the XLifter "home screen" will display, indicating zero lift and "Not Calibrated."
- If you've installed the Compressor Temperature lead, press ◀ to check the compressor temperature, which should reflect ambient conditions if the compressor was inactive during installation. Press ▶ to return to the home screen.



4.2. Select vehicle type and calibrate XLifter.

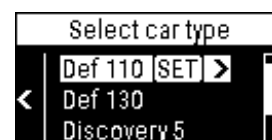
Before using the XLifter for the first time, you must select your vehicle type and perform a calibration.

1. Press ▶ **three times** to reach the **"Confirm calibration"** menu, navigating through the main and settings menus. The menu items are pre-selected for convenience.



2. Setting the Car Type:

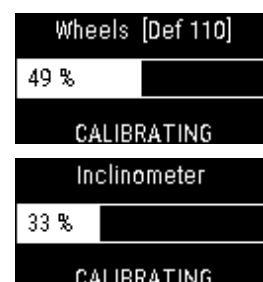
- The default vehicle type is Def 110 – New Defender 110. If a different type is selected, change it to Def 110.
1. Use ▲▼ to select **"change car type"**, then press ▶.
 2. Use ▲▼ to **select your specific vehicle type**, then press ▶.
 - Def 90, Def 110 or 130 - L663 – select your vehicle type.
 - Discovery 5 - L462
 - RRS 2013-22 for Range Rover Sport - L494.



3. Calibrate the XLifter

After setting the vehicle type, you will return to the "Confirm Calibration" menu. Please review chapter 5, Calibration, in the XLifter user manual, or the accompanying calibration leaflet for guidance.

- Ensure the vehicle is on a flat surface.
- Set Land Rover "Original" height to Standard.
- Enable tight mode tolerance.
- When ready, press ▶ to run the calibration procedure.
- The calibration routine will take around 30-60 seconds, after which "Success: XLifter calibrated" will display. This confirms the measurement of normal wheel heights and sets the inclinometer to zero. Press ▶ to return to the home screen.



Congratulations! The installation is complete.

Controller dashboard mounting kit installation.

In a new Defender, a prime spot for the controller is right next to the infotainment screen. This location offers a tidy installation with hidden 12V power supply wiring.

XLifter offers a specially designed dashboard mounting kit (sold separately). It simplifies control module installation and comprises two main parts: a mounting frame and a power lead.

If you have not bought the kit but have the necessary skills, you can carry out a DIY installation. The 3D model for printing the bracket is available at <https://www.xlifter.com/xlifter-accessories/>. Use this guide as a reference to make your own power lead with T-splice connectors and connect it to a suitable ignition-switched 12V source.

The control module power cable uses standard polarity markings: red or white is positive (+), and black is negative (-). The connector is a standard 5.5/2.1mm DC barrel connector, centre-positive. The control module has reverse-polarity protection diodes and a small internal connector for fitting a custom power lead.

In this procedure, you'll disconnect the dashboard USB phone charger to connect the XLifter 12V power lead.

- a)** Remove the rubber cover around the USB charger by lifting it up and pulling it towards the front. This step should be straightforward.
- b)** Removing the USB charger requires a bit more effort and significant force! It's held in place by two clips, one on the front and one on the back. You'll need an extraction tool for this. If you don't have one, a bent spoon (à la Matrix) could work. Start by using a flat screwdriver or a dinner knife to gently lift an edge, then insert your makeshift tool or screwdriver to lever the charger out. It might be helpful to have a friend assist you. Be careful to avoid scratches! Avoid pulling on the left/right sides of the charger as there are no clips there, and you risk breaking the edges. Focus your efforts on the front/back sides.



- c)** Lift off the rubber cover behind the infotainment display to reveal a small hole.

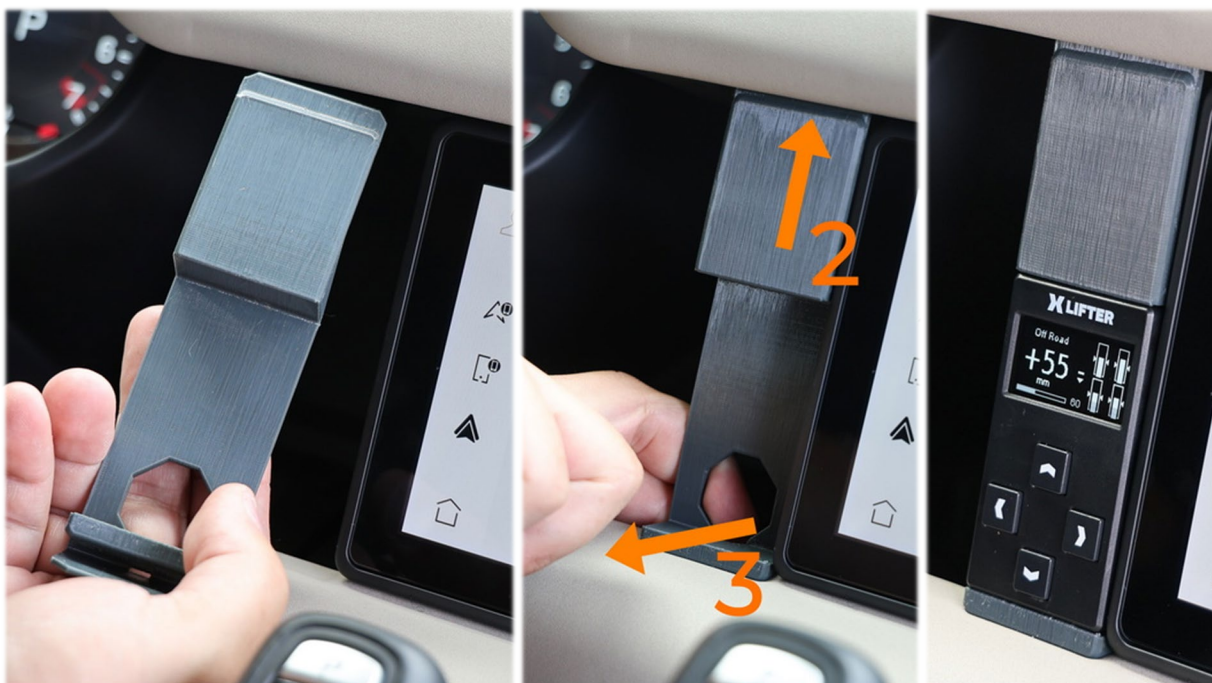
- d)** Press the latch and unplug the vehicle harness from the USB charger. Secure the plug to the plastic edge so it cannot fall into the hole.
- e)** Feed the power lead's round DC connector (on the thinner cable) through the USB charger opening and out through the small hole behind the display.
- Tip: Working in reverse is easier. Feed the controller's DC connector through the small hole to the USB charger opening. Pull it out with a hook or pliers, connect the power lead's DC plug, then gently pull both connectors back through the small hole.



- f)** Connect the power lead's T-shaped connectors to the vehicle loom and USB charger. Switch on the ignition and check that both the charger and control module work, then refit the charger.



- g)** Install the controller mounting bracket:
1. Position it fully behind the upper and lower white dashboard trim pieces.
 2. Slide it upwards so its top edge tucks behind the white trim.
 3. Pull the lower end towards you to slot it into place.
- h)** Route the controller power cable through the bracket opening. Flex the bracket slightly outwards to fit the controller. Connect the DC connectors; the XLifter display will turn on.



- i) Make a small cut (about a 45° angle) in the rubber "locking" protrusion to accommodate the power cable. Organize the power cables neatly behind the infotainment screen and replace the rubber cover.



Congratulations, installation is complete!

5. Removing XLifter from the vehicle.

To remove XLifter from your vehicle, reverse the installation steps, noting the following:

- For temporary removal, the XLifter cable harness can remain in the vehicle. Just disconnect Connector C from the XLifter EAS unit and then insert the bypass plug into the now-free C connector.
- To detach the EAS unit from the 3M reclosable fastener, pull it straight out, perpendicular to its printed face, towards the centre console. Pulling sideways will not work. Leave any fastener pieces attached to the EAS unit in place; they are sturdy. If moving the unit to another vehicle, you will need a new 3M SJ3550 reclosable fastener, 25 mm wide with 39 heads per cm² (not included).

6. Wrapping up and next steps.

You've successfully completed the installation of your XLifter, taking an important step to enhance your vehicle's air suspension capabilities. Thank you for following the installation guide.

To understand how to use XLifter, **please read the User Guide** next. It explains operation and limitations so you can use the system safely and avoid undue stress on vehicle components.

For additional support and troubleshooting, the FAQ at <https://www.xlifter.com/faq/> is a valuable resource.

Thank you for choosing XLifter. We are happy to have you on board and wish you many great overlanding adventures. Enjoy the journey!

7. Troubleshooting

The warranty is valid in accordance with generally accepted warranty terms. The appearance, functionality and completeness of the product are checked before shipment. Any claim must be submitted to the seller within the warranty period. The warranty lasts two years from the date of sale.

8. Contacts and support

If you have any trouble or suspect something is not working properly, try the following:

- Visit the online FAQ with over 40 entries: <https://www.xlifter.com/faq/>

Question	Answer
Keys are locked	Deactivate the keylock in the service menu. https://www.xlifter.com/faq/?open=41
Vehicle tilts to one side. The suspension graphics may show opposite wheel movement. Compressor runs excessively.	The wrong vehicle type is selected. https://www.xlifter.com/faq/?open=32 https://www.xlifter.com/faq/?open=33
The levelling function shows implausible or excessively high tilt angles.	The EAS unit has probably moved or become detached from the 3M fasteners. https://www.xlifter.com/faq/?open=36
One or more target wheel height indicators are missing from the suspension graphics. What happened?	The calibration values are wrong. Please calibrate XLifter again.
The control module reports a "NO EAS RESPONSE" error. What's the remedy?	A: Wireless communication with the EAS unit is failing. Possible causes include: Check the EAS unit installation and connectors. The green LED must blink. All cable loom connectors must be firmly connected. Loose connectors may be the cause. The control module is connected to a permanent power supply and the ignition is off. Power the control module only from an ignition-switched 12V source. The control module and EAS unit are not paired (e.g. after replacing a unit). Pair them via Service menu -> Pair EAS unit; see chapter 7 of the user manual.
... and 40 more online at https://www.xlifter.com/faq	

- Join the “**XLifter user support group**” **Facebook group**:
<https://www.facebook.com/groups/XLifterSupport>
- Send us an email to info@xlifter.com or contact your dealer.

Space for custom notes:

XLifter by:

eXpedition tech s.r.o.

Těšnov 1163/5

110 00 Praha 1, Nové Město

Czech Republic

info@xlifter.com

www.xlifter.com

Date of installation:

Seller / installer