

LINX

VEHICLE ACCESSORY INTERFACE



INSTALLATION GUIDE

LX100 Vehicle Accessory Interface Kit | 18.3.24





WHAT IS LINX?

WHAT IS LINX?

LINX is a sleek touchscreen interface that enables total control of both new and existing 4X4 Accessories. Gone are the days where the only option for installing aftermarket switches meant drilling multiple holes into the dashboard.

INTRODUCING TOTAL CONTROL

LINX is a unique modern controller that declutters the dashboard and centralises the command of vehicle accessories by replacing classic switches, gauges and monitors with one sleek and smart driver interface. Built on an expandable platform, LINX will continue to evolve your on and off road driving experience both now and into the future.

The mobile touchscreen display integrates seamlessly into the vehicle cabin and mounts to a LINX Display Gimbal Mount that's installed within easy reach of the driver. This connects to the LINX Controller which is the brains behind the system, and is conveniently installed out-of-sight either underneath the dash or the seat.



STAY IN THE LOOP

For the latest details, updates and list of accessories, head over to:

www.linx.arb.com.au

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Get to know the basic in's and out's of your brand new LINX - the next generation of 4x4 Accessories.

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WHAT'S IN THE BOX?

Get to know your starter LINX kit components, their purpose and part numbers.

LINX Controller ●
PART # 7450101



LINX Display ●
PART # 7450102



USB Cable ●
PART # 7450104



LINX Gimbal Display Mount ●
PART # 7450103



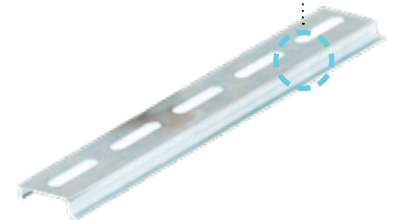
Wiring Harness - LINX Power ●
PART # 180423



LINX Terminal Kit ●
PART # 7450105



DIN Rail 180mm ●
PART # 7450210



Wiring Harness - LINX Patch ●
PART # 180420



Wiring Harness - LINX Inputs ●
PART # 180426





SPECIFICATIONS

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SPECIFICATIONS OVERVIEW

| CONTROLLER FEATURES | |
|--|-----------------------|
| Operates from 12VDC (nominal) power | |
| 25 digital outputs for switching low wattage devices such as relays and solenoids | |
| 8 digital inputs for detecting the state of switches | |
| 2 analog inputs for measuring battery voltages | |
| 7 analog inputs for sensor inputs | |
| Bluetooth based communication link for communication with LINX Display | |
| USB port for communication with LINX Display, and charging the battery in the LINX Display | |
| Clip-off connection cover for securing wiring connections and promoting tidy wiring | |
| Quick rail mounting system allows the LINX Controller wiring connections to be made in an open area before mounting, then quickly and securely mounted in confined space | |
| FCC, CE and RCM certification | |
| Dimensions: 180mm x 126mm x 44mm | Weight: 0.38KG |
| DISPLAY FEATURES | |
| ARB LINX App | |
| ARB LINX magnetic mounting system | |
| Android operating system | |
| USB, Bluetooth, and Wifi connectivity | |
| GPS | |
| Capacitive touch screen | |

| CONTROLLER MINIMUM RATINGS | | | | |
|----------------------------|-----|---------|------|-------|
| DESCRIPTION | MIN | NOMINAL | MAX | UNITS |
| Power supply voltage | 9.0 | 12.8 | 16.0 | VDC |
| Power supply current | | | 8.0 | A |
| Digital output current | | | 0.5 | A |
| Digital input voltage | | | 16.0 | VDC |
| Battery voltage inputs | | | 16.0 | VDC |
| Analog sensor inputs | | | 5.0 | VDC |
| USB charging port voltage | | 5.1 | | VDC |
| USB charging port current | | | 1.4 | A |

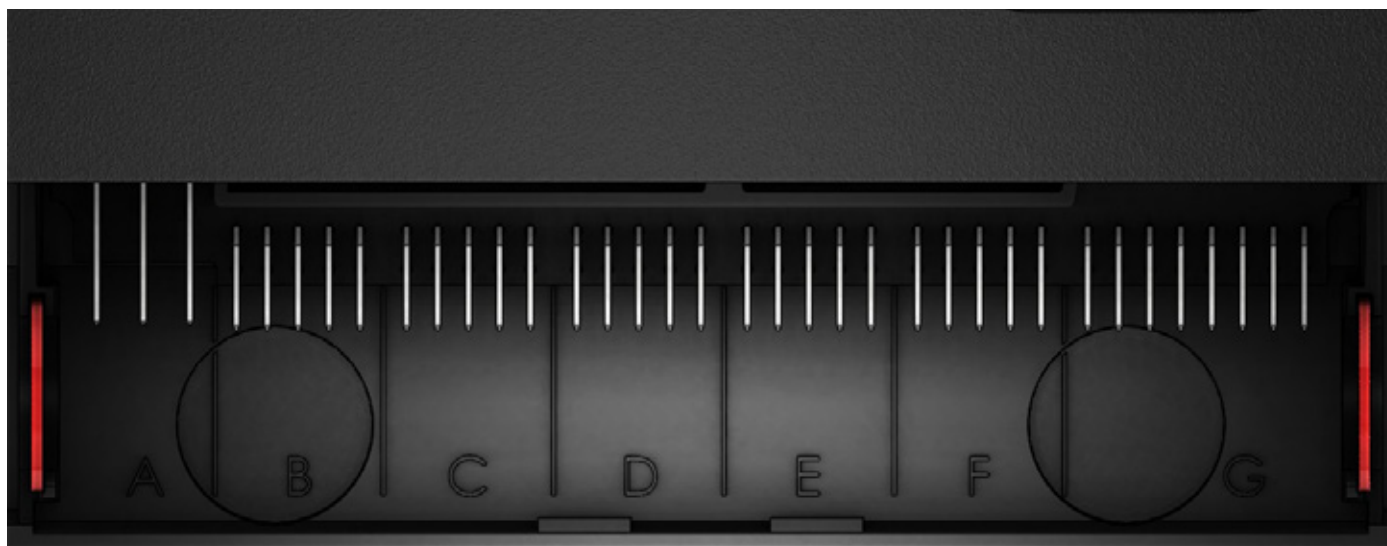
LINX CONTROLLER LAYOUT

The LINX Controller terminals are grouped into blocks for referencing purposes and to simplify identification. The groups do not relate to individual LINX modules, such as Traction or Switchboard.

The relationship between LINX functions and LINX Controller terminals is specified in the LINX Terminals Function Table.

The groups are labeled from A to O, and the terminals in each group are numbered from left to right as shown in the following figures.

The bottom row of connection terminals (see above) are groups A, B, C, D, E, F and G and contain the group of power terminals, digital outputs and digital inputs.



| A | | | B | | | | | C | | | | | D | | | | | E | | | | | F | | | | | G | | | | | | | | | | | | |
|-------|---|---|----------------|---|---|---|---|----------------|---|---|---|---|----------------|---|---|---|---|----------------|---|---|---|---|----------------|---|---|---|---|---------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Power | | | Digital Output | | | | | Digital Output | | | | | Digital Output | | | | | Digital Output | | | | | Digital Output | | | | | Digital Input | | | | | | | | | | | | |
| 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

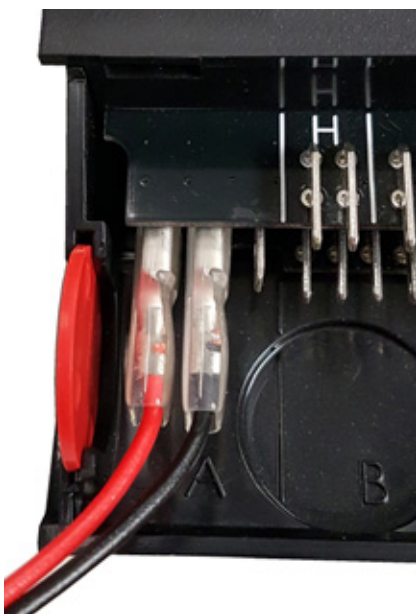
The top row of connection terminals are groups: H, I, J, K, L, M, N, O and USB. These groups contain all the connections related to the analog sensor inputs and the USB port.



| H | | I | | | J | | | K | | | L | | | M | | | N | | | O | | | USB |
|-----------------|---|--------|---|---|--------|---|---|--------|---|---|--------|---|---|--------|---|---|--------|---|---|--------|---|---|----------|
| Batteries 2 & 3 | | Sensor | | | Sensor | | | Sensor | | | Sensor | | | Sensor | | | Sensor | | | Sensor | | | USB Port |
| 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 |

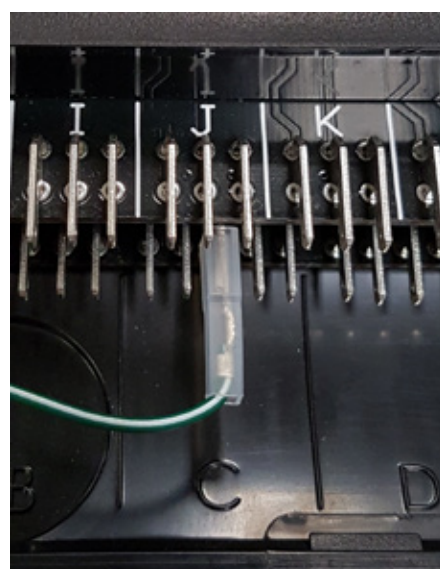
The terminals will be referenced when connecting wiring harnesses in accordance with the following examples:

EXAMPLE ONE



Connect the power positive wire (red) to terminal A1, and the ground negative wire (black) to terminal A2.:

EXAMPLE TWO



Connect the accessory wire to digital output terminal C3:

TERMINALS FUNCTION TABLE

| TERMINAL IDENTIFICATION | TERMINAL FUNCTION | WIRE COLOUR IN CORRESPONDING LOOM |
|-------------------------|--|-----------------------------------|
| Bottom Row | | |
| A1 | Power, battery positive (+12VDC), also Battery Voltage Measurement Battery 1 | Red |
| A2 | Power, battery negative (vehicle ground) | Black |
| A3 | - | - |
| B1 | - | - |
| B2 | Air Locker solenoid, front | Dark green/white trace |
| B3 | - | - |
| B4 | Air Locker solenoid, rear | Yellow/white trace |
| B5 | Compressor, compressor wiring harness relay | Red/white trace |
| C1 | Compressor, PRV, inflate solenoid | Orange |
| C2 | Compressor, PRV, deflate solenoid | Purple |
| C3 | Switchboard, Accessory 1 relay | Not supplied |
| C4 | Switchboard, Accessory 2 relay | Not supplied |
| C5 | Switchboard, Accessory 3 relay | Not supplied |
| D1 | Switchboard, Accessory 4 relay | Not supplied |
| D2 | Switchboard, Accessory 5 relay | Not supplied |
| D3 | Switchboard, Accessory 6 relay | Not supplied |
| D4 | Air Suspension, PRV, inflate solenoid | Orange |
| D5 | Air Suspension, PRV, deflate solenoid | Purple |
| E1 | Air Suspension, front left isolation solenoid | Orange |
| E2 | Air Suspension, front right isolation solenoid | Purple |
| E3 | Air Suspension, rear left isolation solenoid | Orange |
| E4 | Air Suspension, rear right isolation solenoid | Purple |
| E5 | - | - |
| F1 | - | - |
| F2 | - | - |
| F3 | - | - |
| F4 | - | - |
| F5 | Solis PWM brightness control | Blue |
| G1 | Input, vehicle ACC power (+12VDC) | Grey/red trace |
| G2 | Input, parker lights/low beam | Grey/yellow trace |
| G3 | Input, headlight high beam | Grey/blue trace |
| G4 | Input, reverse light | Grey/purple trace |
| G5 | Input, switch, Air Locker, front | Green |
| G6 | Input, switch, Air Locker, rear | Yellow |
| G7 | - | - |
| G8 | - | - |

TERMINALS FUNCTION TABLE

| TERMINAL IDENTIFICATION | TERMINAL FUNCTION | WIRE COLOUR IN CORRESPONDING LOOM |
|-------------------------|--|-----------------------------------|
| Top Row | | |
| H1 | Battery Voltage Measurement, Battery 2 | Not supplied |
| H2 | Battery Voltage Measurement, Battery 3 | Not supplied |
| I1 | - | - |
| I2 | - | - |
| I3 | - | - |
| J1 | - | - |
| J2 | - | - |
| J3 | - | - |
| K1 | Sensor, compressor PRV, +5VDC | Red/green trace |
| K2 | Sensor, compressor PRV, signal | Yellow/green trace |
| K3 | Sensor, compressor PRV, ground | Black |
| L1 | Sensor, air suspension PRV, +5VDC | Red/green trace |
| L2 | Sensor, air suspension PRV, signal | Yellow/green trace |
| L3 | Sensor, air suspension PRV, ground | Black |
| M1 | - | - |
| M2 | - | - |
| M3 | - | - |
| N1 | - | - |
| N2 | - | - |
| N3 | - | - |
| O1 | - | - |
| O2 | - | - |
| O3 | - | - |
| USB | USB | |

Note: Please refer to Operation Guide for further information on setup and use of each module.





CONTROLLER INSTALLATION

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REQUIRED TOOLS

TOOLS REQUIRED

The following tools may be required for the installation of the LINX Controller:

- Power drill
- Phillips head screw driver bit
- Hex key set, metric
- Torx T-20 key
- Wire cutters
- Wire strippers / pliers
- Wire crimper suitable for 16AWG open barrel terminals
- Wire crimper suitable for small open barrel terminals (such as Utilux #147A)

WIRING TECHNICAL NOTE

Each LINX wiring loom kit comes with the required crimps and insulating sleeves to neatly and securely attach to the terminals on the LINX Controller. Please follow the steps below for the 2 different sized crimp terminals.

LINX POWER WIRES

PART # 180423

STEP ONE

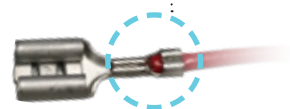
Position the wire as shown with the bare wire in the smaller part of the open barrel, and the wire insulation in the larger part of the open barrel.

STEP TWO

Using wire a crimper suitable for 16AWG wire, crimp the bare wire into the smaller part of the barrel, and the insulated section into the larger part of the barrel.

STEP THREE

Insert the terminal into the soft insulator sleeve



LINX INPUT/OUTPUT TERMINAL WIRING

PART # 180420, 180421 and 180425

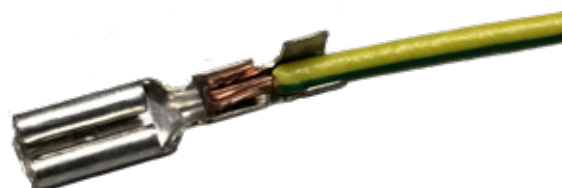
STEP ONE

Strip the insulation as shown. Then place the insulating sleeve over the top of the wire.



STEP TWO

Position the wire as shown with the bare wire in the smaller part of the open barrel, and the wire insulation in the larger part of the open barrel.



STEP THREE

Using crimping pliers suitable for small open barrel terminals (e.g: Utilux 147A) crimp the bare wire.



STEP FOUR

Crimp the larger part of the barrel onto the insulation.



STEP FIVE

Slide the insulating sleeve back up the wire and cover the crimp terminal



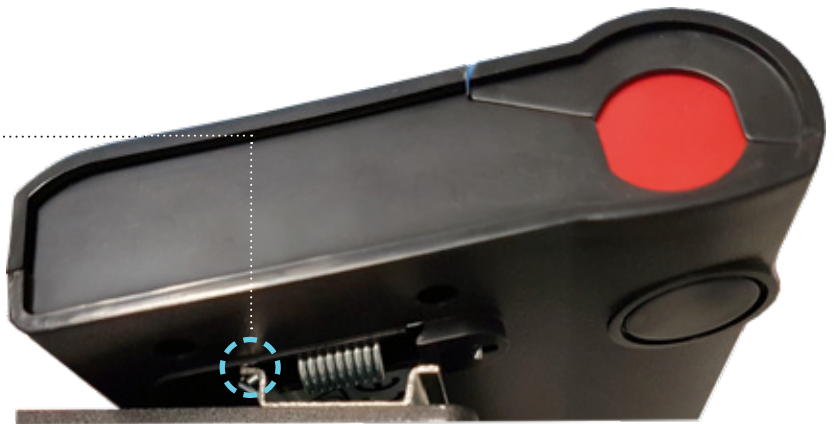
MOUNTING THE CONTROLLER

The LINX Controller is intended to be installed in the vehicle interior, in a location that will not be exposed to moisture or excessive heat.

The LINX Controller is designed with an integrated DIN rail clip-on mount. The short length of DIN rail provided needs to be screwed securely to a rigid part of the vehicle such as a dashboard support bracket. Then the LINX Controller can be simply clipped into place on the DIN rail as shown below

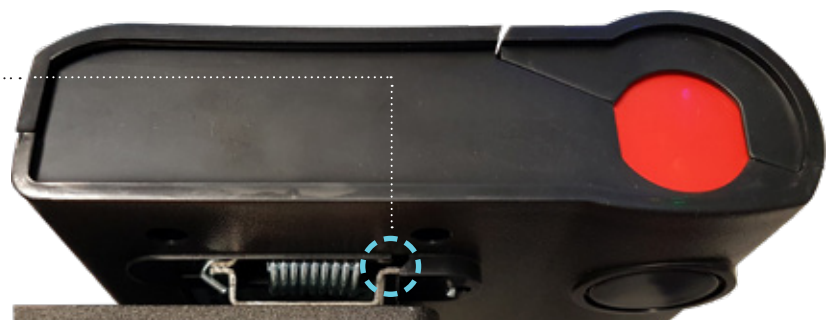
STEP ONE

Clip the wire hooks on the left onto the rail.



STEP TWO

Push the controller to the right until it clips over the other side of the rail.



The intention behind this style of mounting system is that the LINX Controller can be installed in a very confined space. The ideal location is under the vehicle dashboard, such as behind the glove compartment. Other suitable locations are underneath the seats, behind a trim panel, or behind the rear seats in a ute/pick up.

CONNECTING POWER

The LINX Controller is supplied with several wiring looms for connecting the fundamentals such as power, the LINX Display, the vehicle inputs and ARB compressor integration.

The LINX Controller should be powered fulltime and be connected directly to a vehicle battery using the provided wiring harness 180423. If the vehicle is fitted with an auxiliary battery then connect the LINX Controller power to this, especially if the vehicle also fitted with a BCDC charger as they prioritise charging of the auxiliary battery over the primary starter battery. Otherwise the LINX Controller power can be connected to the primary starter battery.

The LINX Controller draws a small amount of current continuously (approximately 90mA). This current draw is perfectly acceptable for a vehicle that is driven regularly and has a healthy battery. For example, over a 24hour period the LINX system would consume 2.16Ah. Compare this with the capacity of a typical car battery, which is around 80Ah and you can see that even over several days the LINX system will not consume much of the battery capacity.

For installation on a vehicle that is only driven intermittently, or only for very short trips that don't allow much charging time, it is recommended to install a battery protector between the battery and most accessories including the LINX Controller. The Victron Energy Battery Protect (ARB part number BPR000065400) is rated to 65A and can be easily programmed to disconnect all connected accessories at your selected battery voltage, thus protecting the battery from being discharged to empty.

Note: If the LINX Controller is disconnected from power by the battery protector, then the LINX Display, which is powered and charged by the LINX USB cable, will also be disconnected from power and will eventually run flat and turn off. When power is restored the LINX Controller will turn on but the LINX Display won't automatically turn on and will need to be manually turned on by holding down the power button for greater than 3 seconds. Running the LINX Display battery flat can be avoided if it is turned off by holding down the power button for greater than 1 second, then selecting 'Power off' from the menu.



Using the provided wiring harness, part number 180423, run the wiring from the battery end which already has the terminals and fuse holder assembled, to the LINX Controller end which is unterminated. This way the unterminated end can pass through rubber grommets and small holes, and be extended or shortened at the LINX Controller end if required.

Position the ring terminal with black heat shrink near the negative battery terminal, and position the ring terminal with red heat shrink near the positive battery terminal (or battery protector). Neatly run the wiring harness from the battery to the LINX Controller, making sure it can be secured with cable ties at 200mm intervals, grouped together with a vehicle factory wiring harness if possible and avoiding hot or moving parts that could damage the harness.

Determine if the wiring harness needs to be extended or can be shortened, ensuring that it can be connected to the battery and LINX Controller at both ends without tension on the wire to prevent fatigue and damage to the terminals.

If the wiring harness needs to be extended, ensure the additional wire used is an equivalent or larger wire gauge than the existing 1.25mm² (16AWG) wire.

Crimp the terminals onto the wire as described above in the wiring tech note. Connect the power positive wire (red) to terminal A1, and the ground negative wire (black) to terminal A2.

UPDATING SOFTWARE

At this stage it is important to check if the LINX Controller is powered on and perform a LINX software update before doing any further wiring.

To do this, you will need to turn on the LINX Display, connect to the Internet (via wifi for mobile data) and then connect to the LINX Controller using the provided USB cable.

The LINX Display may take up to 1 minute to turn on and start the LINX App. When it starts you may briefly see the 'connecting screen' shown below.

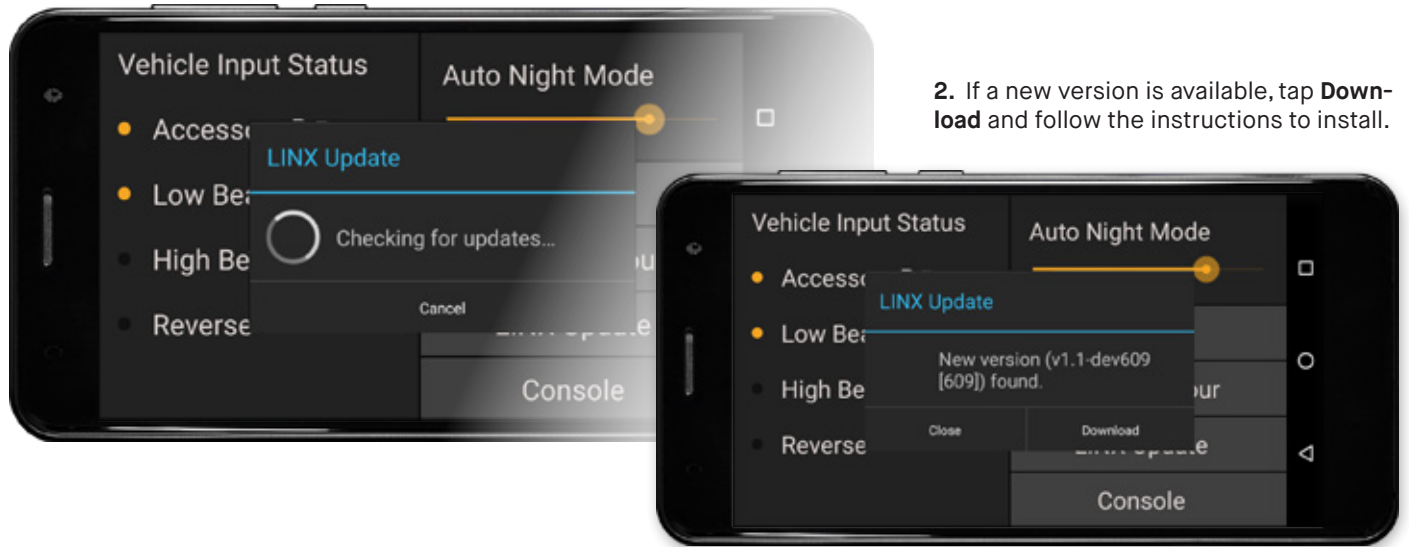
When the LINX Display and LINX Controller are connected, the display should change to 'split screen mode', displaying Speedometer module and Battery module which are activated by default.



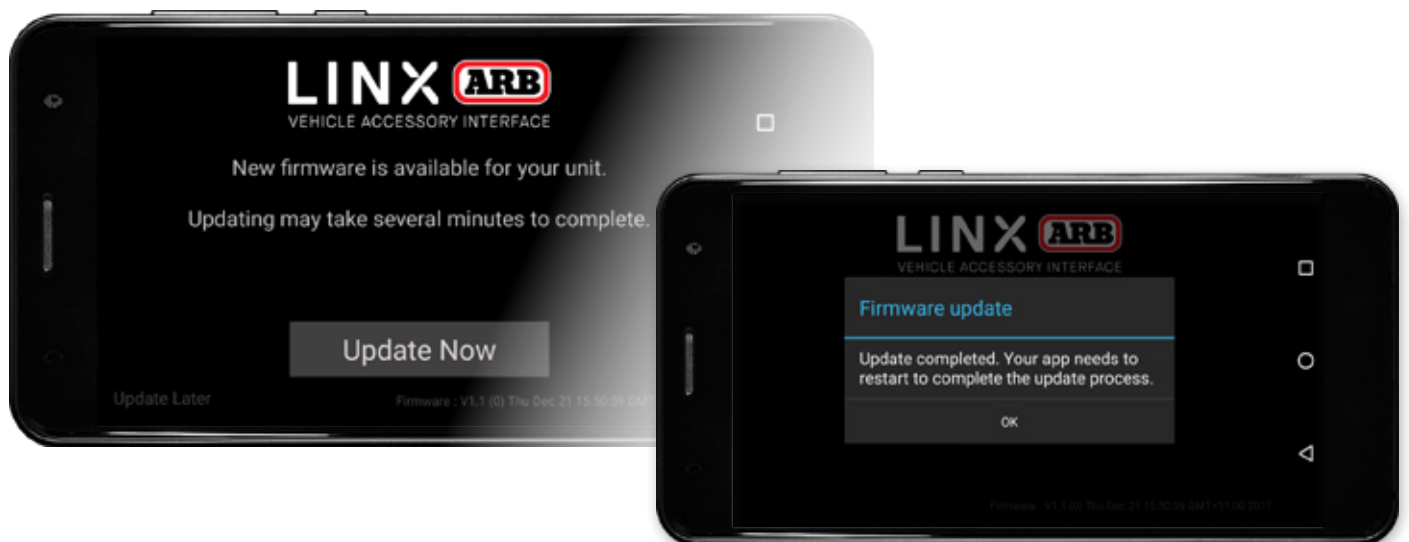
Swipe from left to right across the screen to show the LINX Main Icon Screen. Then tap on the **settings** icon.



1. Upon selecting **LINX Update** the screen will display:



When LINX re-connects after the update, it will determine if the LINX Controller firmware also needs to be updated and show the following screen. Tap **Update Now** and follow the instructions.



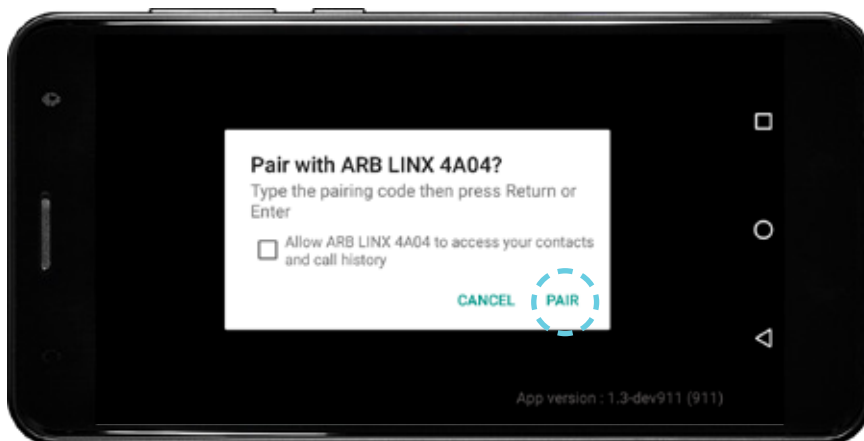
CONNECTING BLUETOOTH

The LINX Display and LINX Controller can communicate using either the USB or Bluetooth connection. But before Bluetooth communication can be used, first they have to be paired.

AUTO PAIRING

The easiest way to pair the display and controller is to first connect them via USB and perform a software update as described in the section above. Then simply unplug the USB cable and when the LINX Display will request permission to pair, as shown below.

Tap **PAIR** to accept the pairing. The LINX Display and LINX Controller are now paired and will connect via Bluetooth whenever in range.



Note: Once the LINX Display and LINX Controller have been Bluetooth paired, the LINX Controller will become invisible to all other Bluetooth devices. The LINX Controller Bluetooth visibility can only be reset by resetting the LINX Controller, by disconnecting/reconnecting it to power.

MANUAL PAIRING

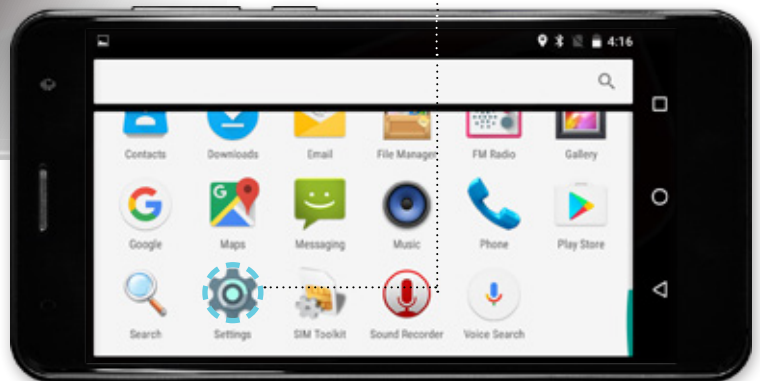
If the LINX system installation is already complete and USB cable hasn't been used to connect the LINX Display and LINX Controller, and the LINX Controller is difficult to access, then the display and controller can be manually paired via the Bluetooth settings.

Access the **BLUETOOTH SETTINGS** by:

1. Open up the **APP DRAWER**

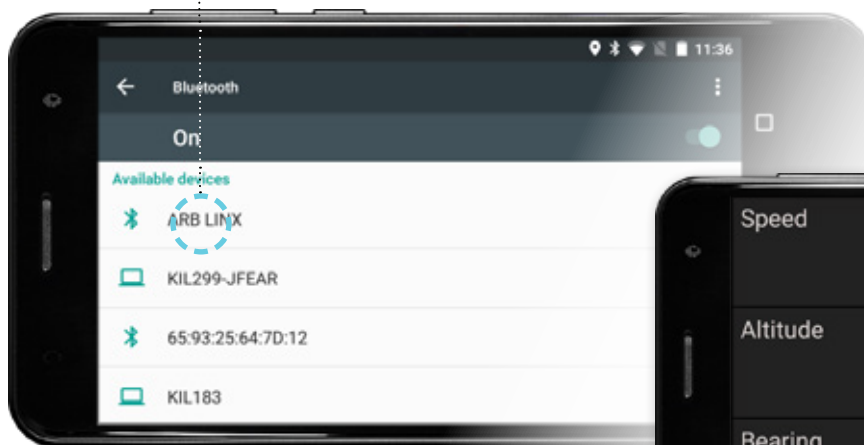


2. Tap **SETTINGS** and select **BLUETOOTH**



To pair with LINX:

1. Tap 'ARB LINX' from the available devices.



2. Once paired, the LINX Display should change to 'split screen mode', and be displaying the vehicle's battery voltage



WIRING CONNECTIONS

CONNECTING TO VEHICLE AUTOMATION INPUTS

The vehicle inputs provide LINX with the status of the vehicles ACC power, parker light/low beam illumination, high beam illumination and reverse. LINX then uses these inputs to control many features so it is important to connect all the vehicle inputs and to connect them correctly. For example; **ACC** is required as most modules can only be used when the vehicle is ON (they are disabled when the vehicle is OFF), ACC also allows LINX to enter a standby sleepmode (saving power) when the vehicle is OFF, and wakes up when the vehicle turns ON, **parker/low beam** input informs LINX to dim the display when they are ON, Switchboard can be automated to turn ON/OFF with any of the inputs, in particular switching your spotlights with the **high beam** input.

The LINX vehicle inputs must be connected to 12V pickups and as such in many vehicles they can be easily found as described below. Use **180426** (LINX Inputs Wiring Harness) and the connection table.

ACC PICKUP (controls LINX sleepmode / wake up)

The ACC power pickup can be taken from an ACC circuit in the vehicle fusebox, or the wiring to cigarette lighter / 12V sockets, or other factory dashboard switches for things such as fog lights. Note: if an ARB compressor is already installed then the compressor wiring harness (red/yellow wire) is a easy place to find ACC power.

PARKER LIGHT/LOW BEAM PICKUP (controls LINX Display auto dimming)

The parker light/low beam pickup can again be taken from the ARB compressor wiring harness (blue/white) which has illumination for the dashboard switches. If an ARB compressor isn't installed then this will be different for every vehicle, but a good starting point is from other factory dashboard switches that also have illumination.

HIGH BEAM PICKUP

The high beam pickup can be taken from the back of the headlight, as it is with the various ARB driving light looms. If driving light loom is already installed then the same high beam pickup can be used.

Note: With negatively switched headlights, the pickup should come from the negative switched side of the light globe. The input pickup will need to be configured as described in the following section.

REVERSE PICKUP

The reverse pickup location will be different for every vehicle but is usually found easiest at the vehicle tail lights.

| DESCRIPTION | WIRE COLOUR | CONTROLLER TERMINAL ID |
|--------------------------|----------------------|------------------------|
| ACC power pickup | Grey / Red stripe | G1 |
| Parker / Low Beam pickup | Grey / Yellow stripe | G2 |
| High Beam pickup | Grey / Blue stripe | G3 |
| Reverse Light pickup | Grey / Purple stripe | G4 |



CONFIGURING TRADITIONAL NEGATIVELY SWITCHED INPUTS

The LINX inputs are configured as positively switched by default. This means that 0V at the input is treated as off, and 12V at the input is treated as on. If any of the input pickups are negatively switched (12V is off, and 0V is on), then they will need to be configured from the LINX Display.

If a vehicle has traditional negatively switched High Beams then you would configure LINX with code IC002 as described below.

In some newer model vehicles the headlights have internal controllers and utilise CANBUS or another manufacturer specific control system. In such vehicles traditional 'back of the headlight' pickups cannot be used. Instead specific headlight pickups and LINX Input Configuration Codes must be used. These are covered in the following sections.

The following table lists the Input Configuration Codes available.

| NEGATIVELY SWITCHED INPUT | INPUT CONFIGURATION CODE |
|--|--------------------------|
| Reset all inputs to positively switched | IC000 |
| Parker / Low Beam negatively switched | IC001 |
| High Beam negatively switched | IC002 |
| Reverse light is negatively switched | IC003 |
| Nissan NP300 headlight configuration | IC004 |
| Toyota Prado 2017 LED headlight configuration | IC005 |
| Toyota LandCruiser LC300 headlight configuration | IC006 |

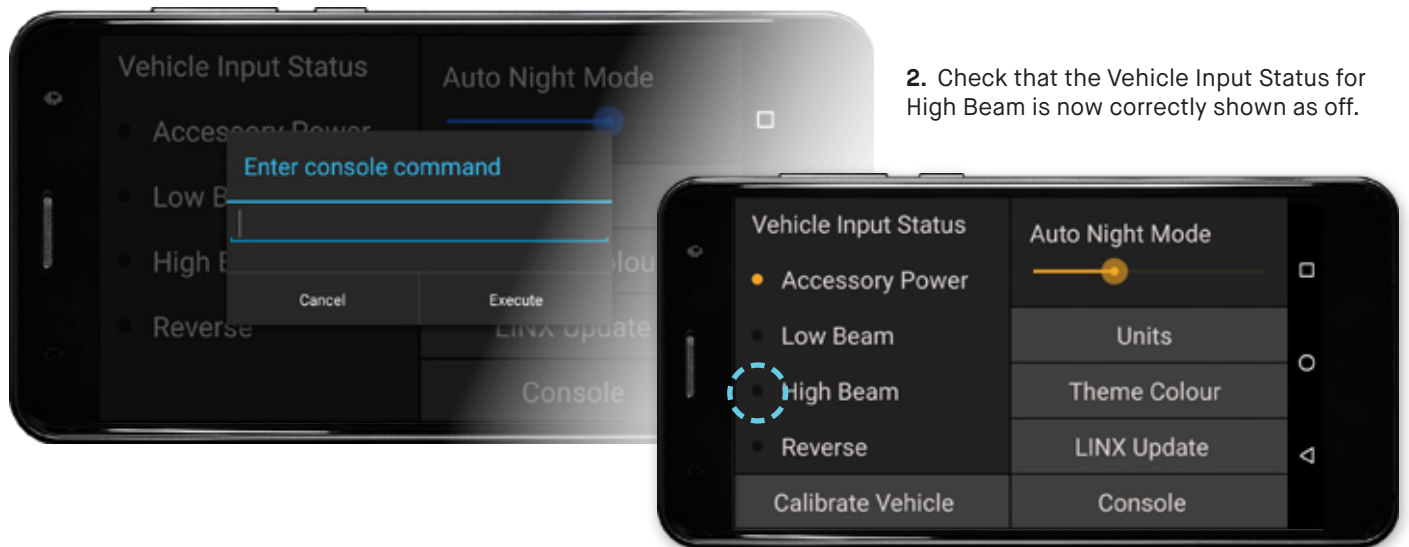
Note: the reset code IC000 is used if an incorrect configuration code is entered.

The following example shows configuring a vehicle with high beam headlights which are negatively switched. This is performed with the headlights off.

1. From the main icon screen, tap **SETTINGS**.



1. A new window 'Enter Console Command' will open. Tap near the cursor to open the keyboard. Type in the appropriate code from the table. Tap 'Done' and 'Execute.'



2. Check that the Vehicle Input Status for High Beam is now correctly shown as off.

CONFIGURING NISSAN NAVARA NP300 HEADLIGHTS

The Nissan Navara NP300 requires specific headlight pickups as described below, and the LINX Input Configuration Code for 'Nissan NP300 headlight' must be entered via the LINX Display.

- On the left-hand side headlight (passenger side), locate the 8 pin connector shown.
- Find the Pink wire (pin #1).
- Find the Green wire (pin #2).
- Connect the LINX low beam pickup to Pink.
- Connect the LINX high beam pickup to Green.

Note: The LINX parker / low beam input must be connected to this low beam pickup, otherwise the high beam input won't function correctly. This means parker light pickup cannot be used.



| NEGATIVELY SWITCHED INPUT | INPUT CONFIGURATION CODE |
|--------------------------------------|--------------------------|
| Nissan NP300 headlight configuration | IC004 |

CONFIGURING TOYOTA PRADO WITH LED HEADLIGHTS (November 2017 onwards)

The Toyota Prado with LED headlights (November 2017 onward) requires specific headlight pickups as described below, and the LINX Input Configuration Code for 'Toyota Prado 2017 LED headlights' must be entered via the LINX Display.

- Locate the 20 pin indicator stalk connector shown.
- Find the Light Green wire (pin #17).
- Find the Blue wire (pin #12).

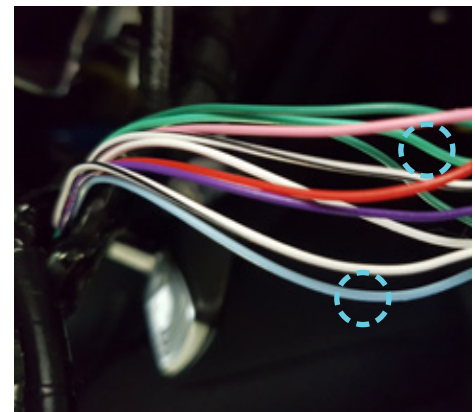
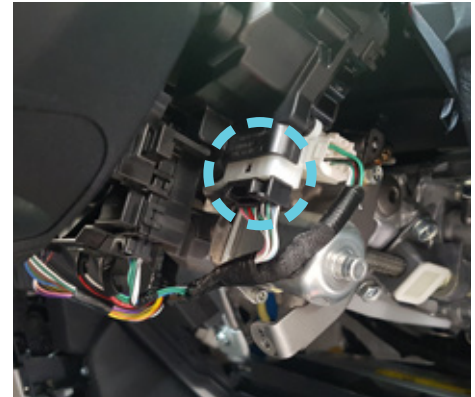
Verify that the wires behave in accordance to the following table.

| LIGHT SWITCH POSITION | WIRE COLOUR | |
|-----------------------|-------------|-------|
| | LIGHT GREEN | BLUE |
| OFF | BATT+ | BATT+ |
| PARKERS | BATT+ | BATT+ |
| LOW BEAM | BATT+ | 0V |
| HIGH BEAM | 0V | 0V |

- Connect the LINX low beam pickup to Blue.
- Connect the LINX high beam pickup to Light Green.

Note: The LINX parker / low beam input must be connected to this low beam pickup, otherwise the high beam input won't function correctly. This means parker light pickup cannot be used.

Note: Auto high beams must be turned off as they may not function correctly when spotlights are turned on with high beams.



| NEGATIVELY SWITCHED INPUT | INPUT CONFIGURATION CODE |
|---|--------------------------|
| Toyota Prado 2017 LED headlight configuration | IC005 |

CONFIGURING TOYOTA LANDCRUISER LC300 HEADLIGHTS

The Toyota LandCruiser LC300 requires specific headlight pickups as described below, and the LINX Input Configuration Code for 'Toyota LC300 headlights' must be entered via the LINX Display.

- Locate the 'Auto / Adaptive High Beam' button connector.
- Find the grey wire as shown.
- Verify that the grey wire has 0V when the vehicle lights are OFF, and 12V(battery voltage) when any vehicle headlights are ON.
- Connect the LINX parker / low beam pickup (pin G2) to the grey wire using the provided grey / yellow stripe wire.

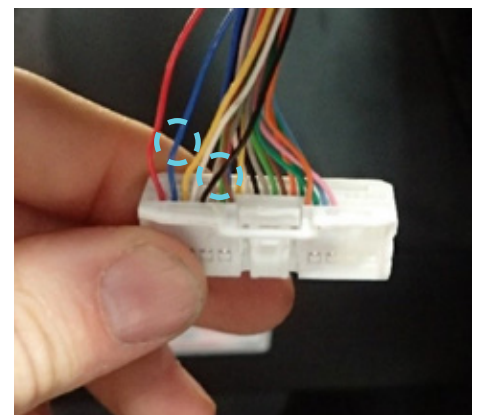


- Locate the white connector beneath the steering column.
- Hold the connector and locate the blue and black wires as shown.
- Connect the LINX high beam pickup (pin G3) to the black wire using the provided grey / blue stripe wire.
- Connect the blue wire to LINX input pin G7. A wire hasn't been supplied for this so just use an appropriate length of wire that is a different colour to the other LINX input wires. This wire (around 0.5mm²) will do.



Note: The LINX parker / low beam input must be connected to this low beam pickup, otherwise the high beam input won't function correctly.

Note: Auto high beams must be turned off as they may not function correctly when spotlights are turned on with high beams.



| NEGATIVELY SWITCHED INPUT | INPUT CONFIGURATION CODE |
|--|--------------------------|
| Toyota LandCruiser LC300 headlight configuration | IC006 |

INTEGRATION WITH ARB COMPRESSOR WIRING HARNESS

Using the 180420 (LINX Compressor Patch Wiring Harness) allows LINX to patch into the existing ARB compressor wiring harness. This provides LINX with pickups from the Air Locker switches, and outputs to control the compressor and Air Locker Solenoids.

Connect the wiring as follows:

| DESCRIPTION | WIRE COLOUR | CONTROLLER TERMINAL ID |
|--------------------------|-----------------------|------------------------|
| Front Airlocker Solenoid | Green / White stripe | B2 |
| Rear Airlocker Solenoid | Yellow / White stripe | B4 |
| Compressor relay | Red / White stripe | B5 |
| Front Airlocker switch | Green | G5 |
| Rear Airlocker switch | Yellow | G6 |



BATTERY VOLTAGE MONITOR CONNECTION

Up to three battery voltages can be monitored. The main battery (battery 1) voltage is already monitored through the power connection. The other two batteries can be connected using terminals H1 and H2.

In the LINX App these will be battery 2 and 3 respectively.

| DESCRIPTION | WIRE COLOUR | CONTROLLER TERMINAL ID |
|-------------|---------------|------------------------|
| Battery 1 | Red | A1 |
| Battery 2 | User supplied | H1 |
| Battery 3 | User supplied | H2 |



SWITCHBOARD CONNECTION

The ARB LINX Switchboard module has been designed to replace all of your aftermarket accessory switches.

CONNECTION TO ARB DRIVING LIGHT LOOM

For connection to ARB driving light loom the following steps must be taken:

1. Unplug the bullet connectors on the black/white wire and black earth wire, and remove the switch and fuse from the loom.
2. Connect the black/white wire from the relay to the required switchboard output (C3, C4, C5, D1, D2, D3) as per the wiring tech note. HINT: Wiring terminals and insulator sleeves are available in 7450105 (ARB LINX Terminal Kit).
3. The black earth wire that used to run from the relay to the switch is no longer required and can be removed from the loom.

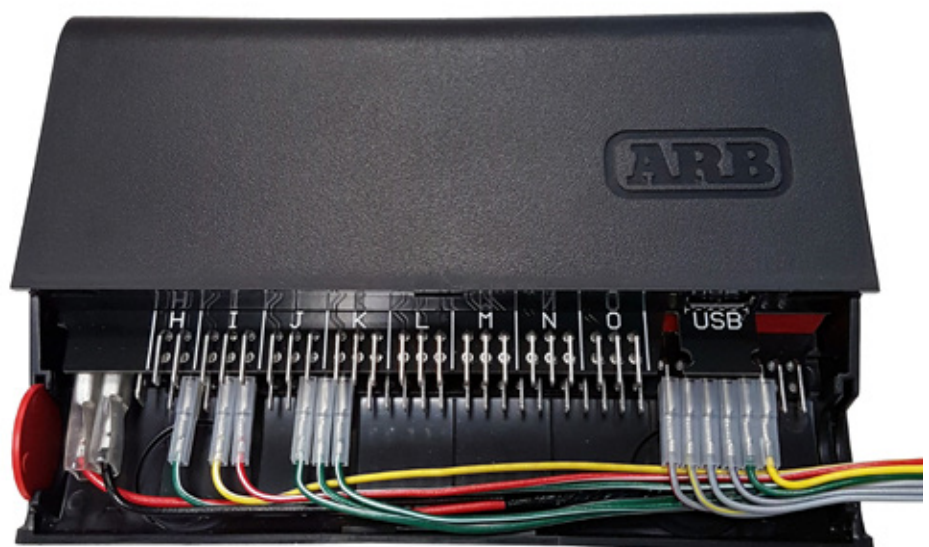
Note: Do not remove the short earth wire with eye terminal, as this is needed to earth the relay.

CONNECTION TO ARB INTENSITY SOLIS LIGHT LOOM

Requires the Intensity Solis LINX loom (SJBLINX). Connect the 5 pin plug to the Intensity Solis loom, and securely route the other end to the LINX Controller.

Connect the white wire (on/off) to the required switchboard output (C3, C4, C5, D1, D2, D3).

Connect the blue wire (brightness control) to output F5.



Note: Pins C3, C4 & C5 have been connected to 180422 (LINX Relay Harness) in the above image.

CONNECTION TO ARB INTENSITY IQ LIGHT LOOM

The Intensity IQ loom has a 'system active trigger wire' (orange) that can be connected to the vehicle ignition circuit or vehicle illumination circuit. When used with LINX it should be connected to the vehicle ACC circuit. This wire switches ON the Intensity IQ LCM and allows LINX to connect with it via BT. When switched OFF it turns OFF BT and activates the Intensity IQ courtesy feature.

While the Intensity IQ loom doesn't require direct connection to LINX, as LINX controls the light wirelessly, LINX can be utilised to provide the Intensity IQ loom with a high beam trigger instead of additional high beam looms such as #3521060 for Toyota Prado with LED headlights, and #3525020 for Toyota LandCruiser LC300.

When a LINX Switchboard Module button has been configured as Dimmable Light Type = Intensity IQ, then connect the yellow wire (Intensity IQ loom high beam trigger) to the switchboard output (C3, C4, C5, D1, D2, D3) associated with the switchboard accessory. For example if Switchboard Accessory 1 is configured as Intensity IQ then C3 will be the high beam trigger.

CONNECTION TO BUSHRANGER VLI LIGHTS

Simply connect the Bushranger dimming control wire to LINX output F5.

CONNECTION TO OTHER ACCESSORIES

For connection to other accessories ARB recommends the use of 180422 (LINX Relay Harness).

Simply connect the green/white wire to the required switchboard output (C3, C4, C5, D1, D2, D3) as per the wiring tech note, and join the rest of the accessory wiring to the appropriate flying leads in the relay block.

CONNECTING THE USB CABLE

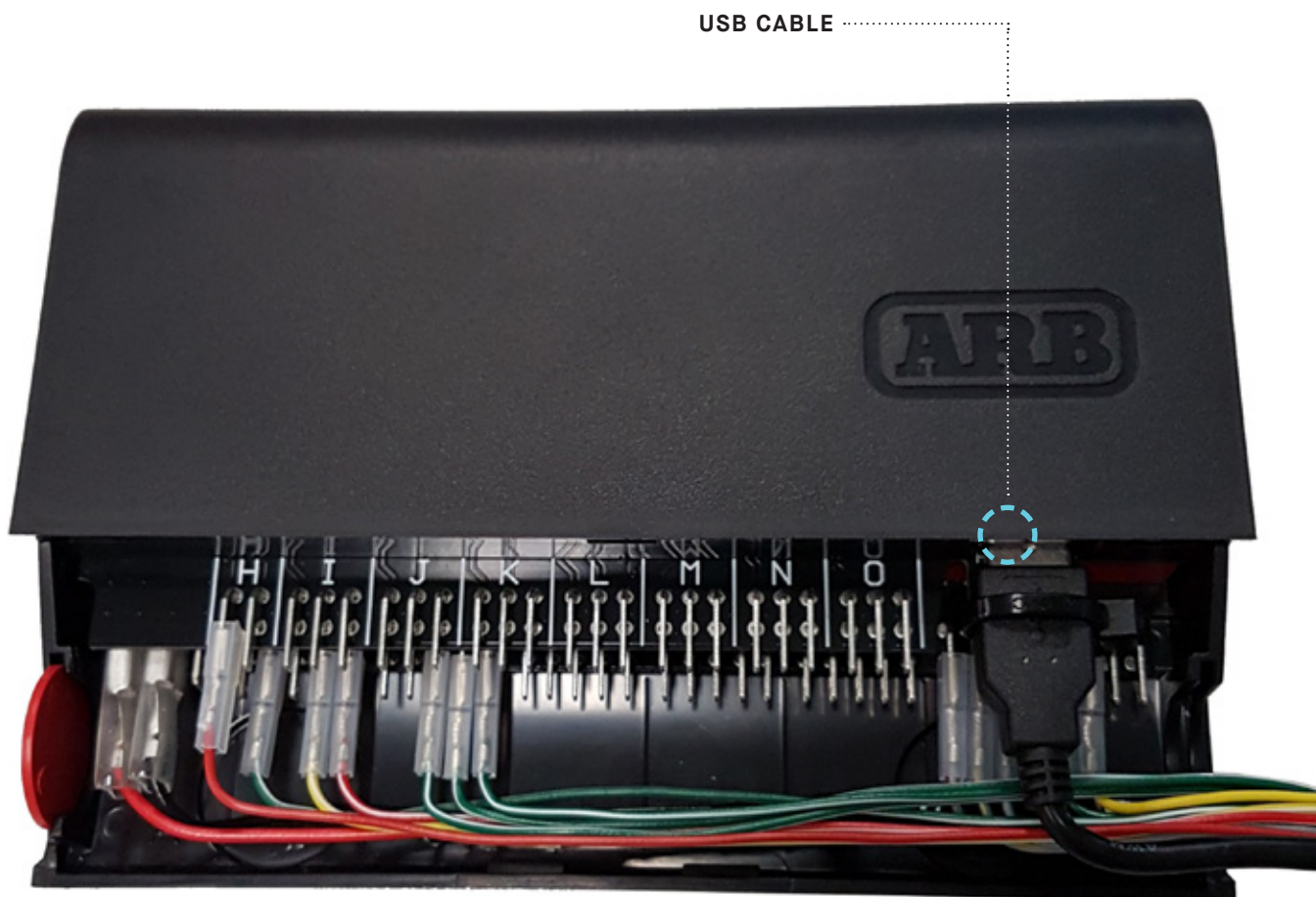
The USB connection can be used to power and charge the LINX Display, and provide the communications channel between the LINX Controller and LINX Display.

The provided USB cable (7450104), has a USB A connector at one end for connection to the LINX Controller, and a USB micro B (back angled) connector at the other end for connection to the LINX Display.

The USB cable should be secured to the LINX Controller using a cable tie as shown below. This prevents vibration or cable strain from damaging the USB connection.

NOTE:

The LINX Display can also be connected to an alternate USB power socket. In this case, the communications channel will be via Bluetooth only.



INSTALLING DISPLAY MOUNT

The LINX Display Gimbal Mount can be fixed to a vehicle specific A-pillar bracket (which is available separately) or directly screwed to a dashboard if desired.

Firstly, the mount must be disassembled as shown below:

STEP ONE

Unscrew the thumb nut and remove the centre bolt.



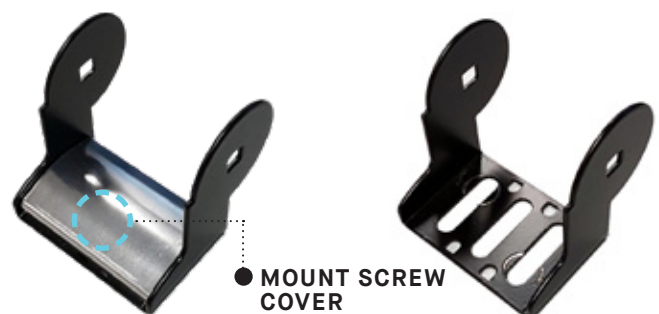
STEP TWO

Hold the steel bracket in one hand, and the pivot assembly in the other hand. Then pull them apart.



STEP THREE

Remove the mount screw cover from the steel bracket.



STEP FOUR

Screw or bolt the steel bracket to the dashboard, console, or LINX A-Pillar bracket.

STEP FIVE

Reassemble by following the steps in reverse.



INSTALLING OPTIONAL LINX ACCESSORIES

[BACK TO TABLE OF CONTENTS](#)

COMPRESSOR MODULE - PRESSURE CONTROL

The LINX Compressor module - Pressure Control feature provides the capability to inflate/deflate tyres and other inflatable accessories to a user settable pressure. It requires the installation of the following hardware:

- LINX Pressure Control Kit (7450107)
- Remote Hose Coupling Mount Kit (171314)
- Reinforced Hose (range of lengths from 0.3m to 3m, 0740201 - 06)
- 1/8 BSP to JIC-4 Adapter Fitting (0740105)

Note that the Compressor module and Air Suspension module do not share any hardware and individual LINX Pressure Control Kits are required by each module.

LINX PRESSURE CONTROL KIT (7450107)

LINX Pressure Control Kit contains a LINX PRV (Pressure Regulating Valve), a LINX Pressure Transducer, and 2 associated wiring looms.



LINX PRV (PRESSURE REGULATING VALVE)

The LINX PRV has multiple input and output ports, all of which are 1/8 BSPT threads. The two input ports allow for multiple PRVs and Air Locker solenoids to be 'daisy chain' connected, meaning that they share the air supply as shown in the figure at the bottom of the page.

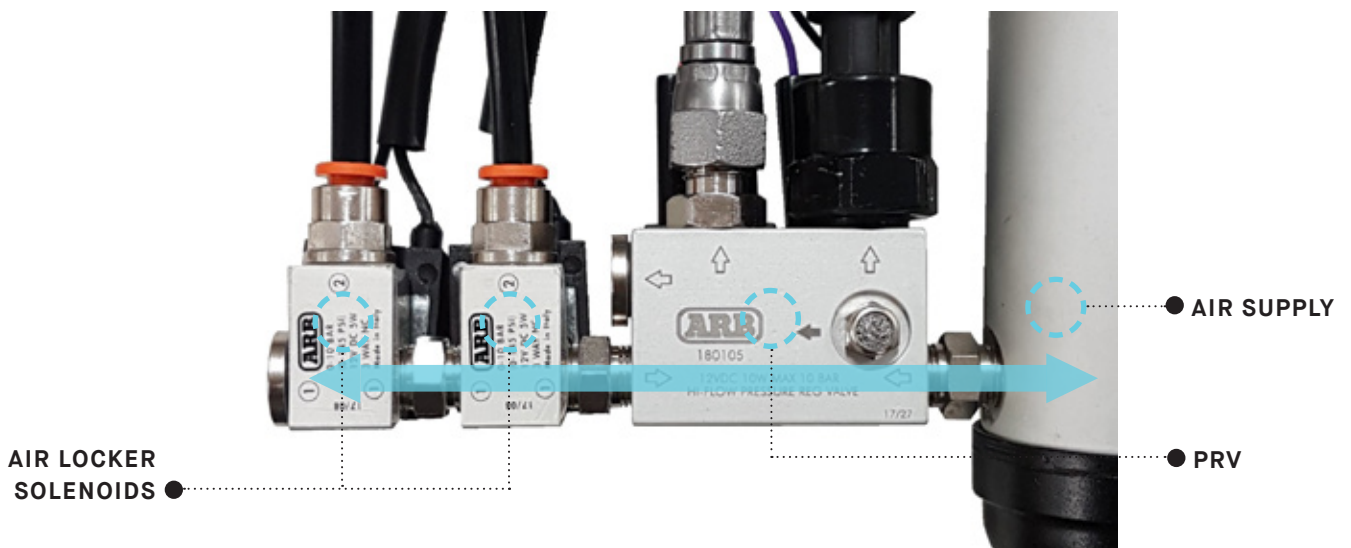
The three output ports simply allow for the installer to arrange the pressure transducer and output airline(s) in a configuration that best suits the particular installation.

PRV PORT IDENTIFICATION



DAISY CHAIN CONNECTION

By connecting the PRV and daisy chain Air Locker solenoids input ports together, they share the air supply.



REMOTE HOSE COUPLING MOUNT KIT (171314)

The Remote Hose Coupling Mount Kit provides a simple and secure way to position the ARB Quick Connect Hose Coupling in the best/most accessible location rather than directly on the compressor or PRV, which is often mounted in the vehicle engine bay or another hard to access location.



REINFORCED HOSE (0740201 - 06) AND ADAPTER FITTING (0740105)

The Reinforced Hose and Adapter Fitting (1/8 BSP to JIC-4) are required to connect the PRV to the Remote Hose Coupling.

The Reinforced Hose is a Teflon hose reinforced with a braided stainless outer layer, finished at both ends with a JIC-4 female fitting. It is a high temperature, high pressure, abrasive resistant and mechanically strong fitting. The hoses are available in a range of lengths from 0.3m [12"] (0740201) to 3.0m [9.8'] (0740206) to suit almost any installation. ARB also stocks a selection of JIC-4 fittings to suit these hoses such as 90 deg elbows, joiners, and tee pieces making almost any configuration possible.

Reinforced Hose ●
PART # 0740201-06



Adapter Fittings
PART # 0740105



COMPRESSOR MODULE - PRESSURE CONTROL INSTALLATION PROCEDURE

Note: The LINX Compressor module - Pressure Control feature cannot share the same LINX Pressure Control Kit as the Air Suspension module. A second LINX Pressure Control Kit is required for the Air Suspension module, refer to section 13.

STEP ONE

Connect an **INPUT** port of the LINX PRV to a compressed air supply (e.g. an output port of an ARB Air Compressor). If desired the pre-installed nipple can be relocated to the other input port on the opposite side of the PRV.

Note: Always use thread sealant or PTFE tape to seal all tapered threaded joints. O-ring sealed parallel threaded joints do not require sealant or tape.



STEP TWO

Install the LINX pressure transducer into an **REGULATED OUTPUT** port of the LINX PRV. Any of the PRV regulated output ports may be used (refer section 'LINX PRV Port Identification'). Select the regulated output port that best suits your installation configuration.



STEP THREE

Attach the two connectors of the LINX Solenoid Pair wiring harness (180425) to the two solenoid coils of the LINX PRV. Note that the connector with the purple wire should be matched only with the deflate valve coil (shown on the right directly opposite to the exhaust fitting). Retain the connectors using the supplied screws.



STEP FOUR

Connect the ring terminal (black wire) to a body ground.

STEP FIVE

Connect the transducer connector of the LINX Transducer wiring harness (180421) to the transducer by inserting it until it clicks in.



STEP SIX

Route both wiring harnesses to the controller making sure not to leave the wires under tension after they are secured. Trim off excess length or lengthen harnesses if necessary. Terminate (see Wiring Technical Note) and connect both harnesses to the LINX Controller using connection table on the next page.

STEP SEVEN

Connect the Remote Hose Coupling Mount Kit (171314) to an **REGULATED OUTPUT** port of the LINX PRV. Any of the PRV regulated output ports may be used (refer section 'LINX PRV Port Identification'). Select the regulated output port that best suits your installation configuration.



CONNECTION TABLE FOR COMPRESSOR MODULE - PRESSURE CONTROL

| DESCRIPTION | WIRE COLOUR | CONTROLLER TERMINAL CODE |
|------------------------|-----------------------|--------------------------|
| Sensor power | Red / Green stripe | K1 |
| Sensor signal | Yellow / Green stripe | K2 |
| Sensor ground | Black | K3 |
| Solenoid pair, inflate | Orange | C1 |
| Solenoid pair, deflate | Purple | C2 |

AIR SUSPENSION MODULE - PRESSURE CONTROL

The LINX Air Suspension module provides the capability to control the pressure in up to four isolated air bags or springs. It requires the installation of a LINX Pressure Control Kit (7450107), and potentially one or more Air Suspension Isolation Kits (7450109) according to the following table.

Note that the Air Suspension module and Compressor module do not share any hardware and individual LINX Pressure Control Kits are required for each module.

| CONFIGURATION | LINX HARDWARE REQUIREMENT |
|--|--|
| One airline joined between any number of air bags equally where all air bags share the same pressure and a linked path between them. | 1 x 7450107 (isolation kit not req'd) |
| One airline split to control 2 air bag pressures independently with no pathway between them | 1 x 7450107 1 x 7450109 |
| One airline split to control 3 or 4 air bag pressures independently with no pathway between them | 1 x 7450107 2 x 7450109 |

LINX PRESSURE CONTROL KIT (7450107)

LINX Pressure Control Kit contains a LINX PRV (Pressure Regulating Valve), a LINX Pressure Transducer, and 2 associated wiring looms.



LINX PRV (PRESSURE REGULATING VALVE)

The LINX PRV has multiple input and output ports, all of which are 1/8 BSPT threads.

The two input ports allow for multiple PRVs and Air Locker solenoids to be 'daisy chain' connected, meaning that they share the air supply.

The three output ports simply allow for the installer to arrange the pressure transducer and output airline(s) in a configuration that best suits the particular installation.

PRV PORT IDENTIFICATION



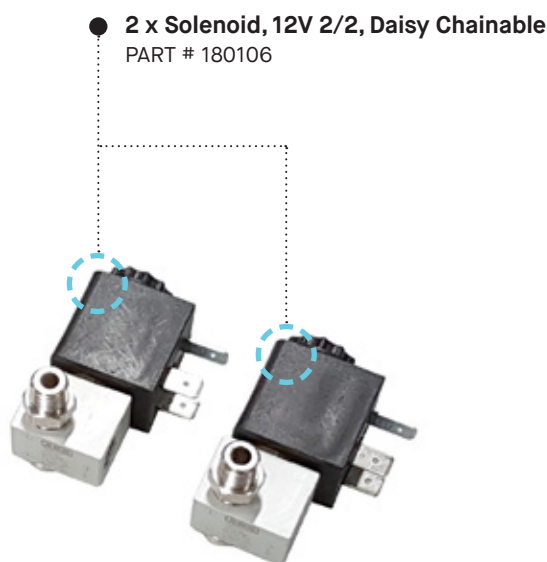
LINX AIR SUSPENSION ISOLATION KIT (7450109)

LINX Air Suspension Isolation Kit contains 2 solenoid valves and a wiring loom to connect them to LINX. Each solenoid valve is used to isolate an air bag from each other allowing the LINX Air Suspension module to open a valve and independently control the pressure in an air bag/spring.

A good example of this is in using independent air bag pressures to load level a vehicle front to back and/or side to side.



● **Wiring Harness - LINX Solenoid Pair**
PART # 180425



● **2 x Solenoid, 12V 2/2, Daisy Chainable**
PART # 180106

AIR SUSPENSION MODULE INSTALLATION PROCEDURE

Firstly Install the LINX Pressure Control Kit, and then the Air Suspension Isolation Kit(s) as require.

Note: The LINX Air Suspension module cannot share the same LINX Pressure Control Kit as the Compressor module - Pressure Control. A second LINX Pressure Control Kit is required for the Compressor module - Pressure Control feature, refer to section 12.

STEP ONE

Connect an **INPUT** port of the LINX PRV to a compressed air supply (e.g. an output port of an ARB Air Compressor). If desired the pre-installed nipple can be relocated to the other input port on the opposite side of the PRV.

Note: Always use thread sealant or PTFE tape to seal all tapered threaded joints. O-ring sealed parallel threaded joints do not require sealant or tape.



STEP TWO

Install the LINX pressure transducer into an **REGULATED OUTPUT** port of the LINX PRV.



STEP THREE

Attach the two connectors of the LINX Solenoid Pair wiring harness (180425) to the two solenoid coils of the LINX PRV. Note that the connector with the purple wire should be matched only with the deflate valve coil (shown on the right directly opposite to the exhaust fitting). Retain the connectors using the supplied screws.



STEP FOUR

Connect the ring terminal (black wire) to a body ground.

STEP FIVE

Connect the transducer connector of the LINX Transducer wiring harness (180421) to the transducer by inserting it until it clicks in.



STEP SIX

If using LINX Air Suspension module for controlling two or more air bags independently, then install the Air Suspension Isolations Kit as described in the steps 7 - 12.

However if only controlling one air bag, or a pair of air bags with a joined airline (hence at the same pressure), then install the air suspension fittings and airlines into any of the PRV regulated output ports (refer section 'LINX PRV Port Identification'). Select the regulated output port that best suits your installation configuration. Proceed to step 12.



STEP SEVEN

The threaded nipple of the isolation solenoid (port 1), must be screwed into a PRV output port.

Any of the PRV regulated output ports may be used (refer section 'LINX PRV Port Identification'). Select the regulated output port that best suits your installation configuration.

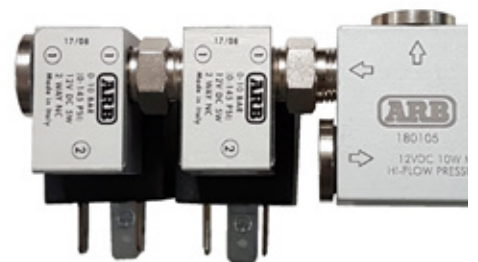
Alternatively the isolation solenoid can be remotely mounted using the provided bracket. Then connect port 1 to the PRV output port via suitable airline and fittings.



Note: Always use thread sealant or PTFE tape to seal all tapered threaded joints. O-ring sealed parallel threaded joints do not require sealant or tape.

STEP EIGHT

The second isolation solenoid must be connected inline with the first (daisy-chain formation). To do this, remove the pre-installed threaded plug from the first isolation solenoid port 1, and screw the threaded nipple of the second isolation solenoid port 1 into it.



STEP NINE

Install the air suspension fittings and airlines into the isolation solenoids outputs (port 2).

STEP TEN

Attach the two connectors of the LINX Solenoid Pair wiring harness (180425) to the two solenoid coils of the LINX PRV according to the connection table on the next page. Retain the connectors using the supplied screws.



STEP ELEVEN

Connect the ring terminal (black wire) to a body ground.

If using LINX Air Suspension module for controlling a up to 4 air bags independently, then install a second Air Suspension Isolation Kit and repeat steps 7 - 11.

STEP TWELVE

Route the wiring harnesses to the controller making sure not to leave the wires under tension after they are secured. Trim off excess length or lengthen harnesses if necessary. Terminate (see Wiring Termination tech note) and connect the harnesses to the LINX Controller using the following table:

CONNECTION TABLE FOR AIR SUSPENSION MODULE

| DESCRIPTION | WIRE COLOUR | CONTROLLER TERMINAL CODE |
|------------------------------------|-----------------------|--------------------------|
| Sensor power | Red / Green stripe | L1 |
| Sensor signal | Yellow / Green stripe | L2 |
| Sensor ground | Black | L3 |
| Pressure Regulating Valve, inflate | Orange | D4 |
| Pressure Regulating Valve, deflate | Purple | D5 |
| Front left isolation solenoid | Orange | E1 |
| Front right isolation solenoid | Purple | E2 |
| Rear left isolation solenoid | Orange | E3 |
| Rear right isolation solenoid | Purple | E4 |

OME PURGE CONTROL KIT (OMEABK001)

The Old Man Emu Purge Control Kit is used in conjunction with an ARB Air Bag Kit for Parabolic Springs. It allows the user to control the purge feature with LINX or the ARB Air Suspension Connect App. Refer to the kits instruction for its installation. Connection to LINX is completed simply by connecting the Purge Control Kits pilot solenoid valve to the LINX Controller terminal E1. Wiring harness 180425 is recommended for this.

Note, the OME Purge Control Kit is only compatible with rear air suspension. It re purposes the LINX Controller terminal E1 which was allocated to front Air Suspension. Hence front air suspension is disabled with the used of this kit.

The Purge Valve Installed must also be selected in LINX Air Suspension module settings.

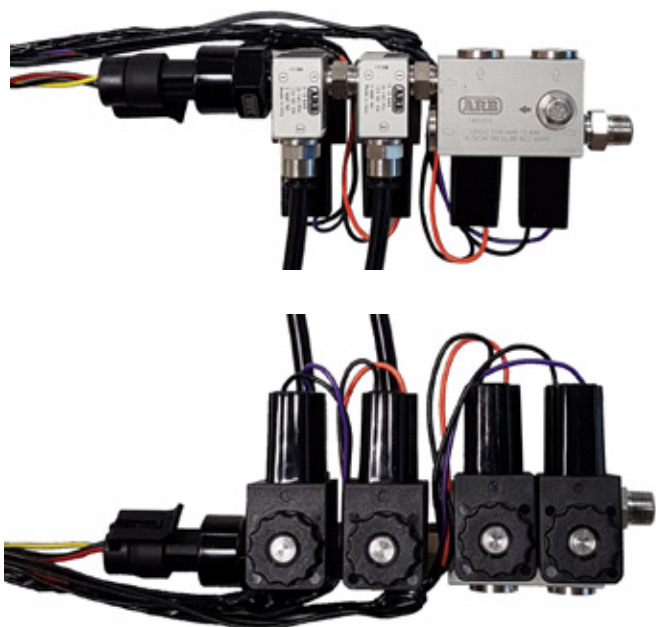
AIR SUSPENSION MODULE CONFIGURATIONS

The figures below demonstrate how configurable the LINX Pressure Control Kit and LINX Air Suspension Isolation Kit are due to the daisy chainable design and multiple outlet ports.

Many more arrangements are possible so experiment with the possibilities to find the arrangement that best suits your installation.

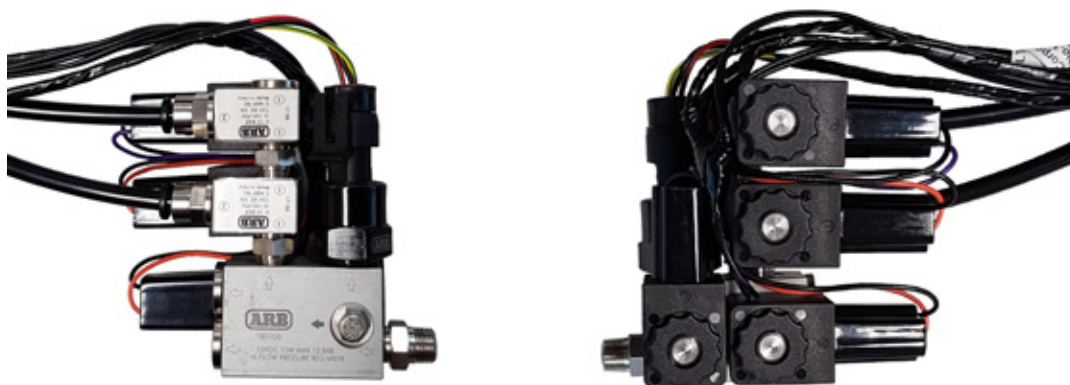
LONG NARROW CONFIGURATION

Here two isolation solenoids are connected a PRV output port. The transducer is connected to the isolation solenoid port 1. Bottom and top views both shown.



SHORT CONFIGURATION

Here two isolation solenoids are connected to one PRV output port. The transducer is connected to the other. Bottom and top views both shown.



A-PILLAR BRACKETS

Designed to suit a large range of popular 4WD's the LINX A-Pillar Brackets provide a secure location for the LINX Display Screen that is in easy reach of the driver, while avoiding having to make additional holes in the vehicle dashboard.

Utilising the LINX Display Gimbal Mount, the display can be orientated and set in the desired position.



| PART # | DESCRIPTION | MAKE | MODEL | YEAR |
|---------|-----------------------------|--|---|---|
| 7450106 | Linx A-Pillar Bracket Kit 1 | Toyota Toyota Toyota Toyota Toyota Toyota Mitsubishi Isuzu Isuzu | Hilux Hilux 2015 on Prado 120 Prado 150 Fortuner 79 series 5 star ANCAP Triton DMAX MUX | 2005-2015 2015-on All All 2015 on 2016 on 2016 on 2012 on 2013 on |
| 7450110 | Linx A-Pillar Bracket Kit 2 | Toyota | LandCruiser 200 series | All |
| 7450111 | Linx A-Pillar Bracket Kit 3 | Ford Ford Mazda Nissan Nissan Volkswagen | Ranger Everest BT-50 Patrol Y62 Patrol GU Amarok | 2015-2021 2015-2021 2015-2021 All All 2010-2022 |
| 7450112 | Linx A-Pillar Bracket Kit 4 | Jeep | JK Wrangler | All |

| PART # | DESCRIPTION | MAKE | MODEL | YEAR |
|---------|------------------------------|--------------------|--|--------------------|
| 7450113 | Linx A-Pillar Bracket Kit 5 | Toyota | 79 Series single cab (pre ANCAP) 79 Series dual cab | All |
| 7450114 | Linx A-Pillar Bracket Kit 6 | Nissan | Navara / NP300 | 2014-on |
| 7450115 | Linx A-Pillar Bracket Kit 7 | Toyota Dodge | Tacoma Ram 1500 | 2016-on 2018-on |
| 7450117 | Linx A-Pillar Bracket Kit 8 | Jeep | JL Wrangler | All |
| 7450122 | Linx A-Pillar Bracket Kit 9 | Toyota | LandCruiser 300 series | 2022-on |
| 7450123 | Linx A-Pillar Bracket Kit 10 | Ford Volkswagen | Ranger Everest Amarok | 2022-on 2023-on |

A-PILLAR BRACKET KIT 1 (7450106)



INSTALLATION STEPS

STEP ONE

Expose the A-pillar pinch weld seam by pulling the door seal away in the area shown.



STEP TWO

Position the A-pillar Bracket in a suitable location along the A-pillar pinch weld seam. Mark the position with tape.

Note: Consider positioning it as low as practical to avoid any chance of blocking the drivers view of the road, avoiding SRS airbags, but still making sure that the LINX Mount and Display doesn't contact the vehicle dashboard or door trim when the door is closed.



STEP THREE

Hold the A-pillar Bracket on the outer side of the pinch weld seam to mark the position of the holes to drill.



STEP FOUR

Drill the holes with a 4.5mm drill bit. Take care not to scratch the A-pillar paintwork with the drill chuck, or drill through into anything that might be located in the A-pillar such as wiring, SRS air bags, plastics, etc.



STEP FIVE

Loosely assemble the LINX Display Gimbal Mount onto the A-pillar Bracket using the M6 bolts and nuts provided in the kit and hand tighten.



STEP SIX

Then re-position the A-pillar Bracket in between the pinch weld seam and the interior plastic trim panel, then insert the M4 Torx head screws in from the outside and tighten using a T-20 Torx key or driver bit.

At this step you can also tighten up the M6 nuts securing the Linx Display Gimbal Mount to the A-pillar Bracket and reassemble it.



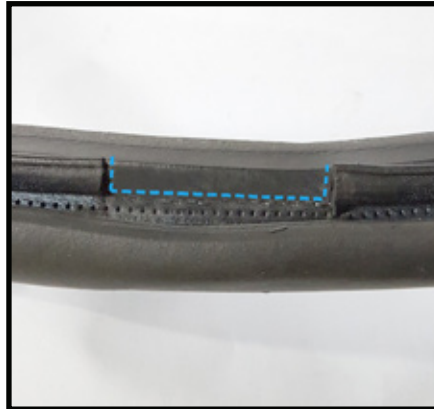
STEP SEVEN

Partially reinstall the door seal and mark the section that interferes with the A-pillar Bracket.



STEP EIGHT

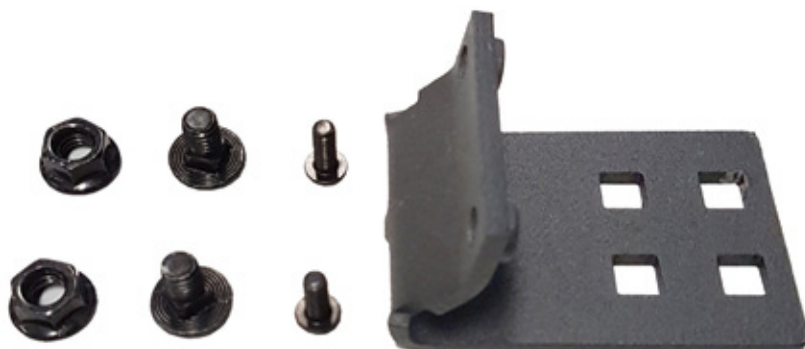
Then using tin snips cut a section from the middle web of the door seal.

**STEP NINE**

Complete the installation by reinstalling the door seal.



A-PILLAR BRACKET KIT 2 (7450110)



The installation of all the A-pillar Bracket Kits are similar, but the Toyota 200 series LandCruiser installation has a few addition steps.

INSTALLATION STEPS

STEP ONE

Unbolt and remove the grab handle from the A-pillar.

STEP TWO

Remove the A-pillar trim panel.

Then, follow Step 2 through to Step 9 from A-Pillar Bracket Kit1. All these steps are done with the trim panel removed. Follow these remaining steps to discretely modify the trim panel.

STEP THREE

Loosen both the M4 Torx head screws, and remove the lower screw, allowing the A-pillar bracket to pivot. The trim panel can now be temporarily reinstalled.



STEP FOUR

Mark the position of the A-pillar bracket on the trip using tape.



STEP FIVE

Remove the trim panel again. Carefully cut the trim panel between the tape marks and along the line in the plastic as shown

**STEP SIX**

Reinstall the trim panel.

STEP SEVEN

Pull the door seal back with one finger and insert the lower M4 Torx head screw and tighten both screws.

STEP EIGHT

Reinstall the grab handle to the A-pillar.

A-PILLAR BRACKET KIT 3 (7450111)



For the installation of this bracket follow the same procedure as A-Pillar Bracket Kit 1.

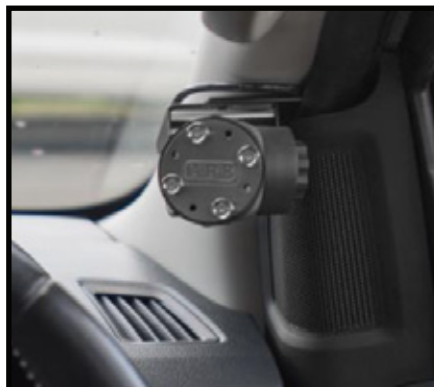
POSITIONING FOR FORD RANGER/EVEREST

To clear the door speaker box it is necessary to assemble the A-pillar bracket and LINX Display Gimbal Mount as shown here.

Loosely assemble them using the M6 bolts and nuts provided in the kit and hand tighten.



As shown here the Ford Ranger and Ford Everest installation is designed to fit in the gap between the door frame and the door speaker box.



A-PILLAR BRACKET KIT 4 (7450112)



INSTALLATION STEPS

STEP ONE

Remove the A-pillar upper trim panel by unscrewing the fastener shown, and the sun visor.



● UPPER TRIM PANEL

STEP TWO

Remove the lower A-pillar trim panel by pulling it away from the windscreen.



● LOWER TRIM PANEL

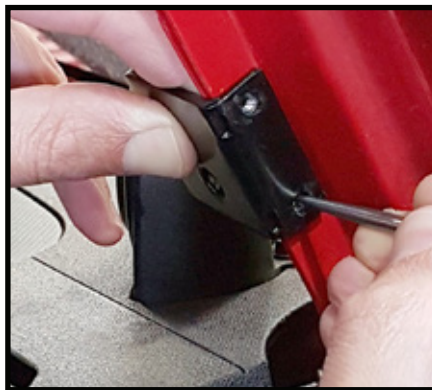
STEP THREE

Position the A-pillar Bracket as shown. It should be against a flat surface, below the rib/lump in the pinch weld seam as shown.

Note: it shouldn't be so low as to interfere with the retaining clip on the back of the trim panel.

**STEP FOUR**

Hold the A-pillar Bracket on the outer side of the pinch weld seam to mark the position of the holes to drill.

**STEP FIVE**

Drill the holes with a 4.5mm drill bit. Take care not to scratch the A-pillar paintwork with the drill chuck, or drill through into anything that might be located in the A-pillar such as wiring, SRS air bags, plastics, etc.

**STEP SIX**

Then re-position the A-pillar Bracket on the inner side of the pinch weld seam and insert the M4 Torx head screws in from the outside and lightly and temporarily tighten using a T-20 Torx key.



STEP SEVEN

Measure and record the position of each hole from the A-pillar seam weld, and height above the dash.



STEP EIGHT

Reinstall the A-pillar trim panel and measure the overhang as shown.

Note: The bracket might interfere with the clip on the back of the trim panel while trying to reinstall it. So to facilitate this remove the lower Torx head screw, allowing the bracket to rotate out of the way.



STEP NINE

Using the recorded measurements mark the hole positions on the A-pillar trim panel. Remember to add the overhang measurement to the horizontal measurements.

For example: From the previous photos the first hole position will be 24mm + 5mm = 29mm from the edge of the trim panel, and 48mm above the dashboard.



STEP TEN

Drill a small pilot hole through the trim panel and check that your positions are correctly centred over the holes in the Linx A-pillar Bracket.



STEP ELEVEN

Open up the holes to 14mm to clear the 12mm spacer washers provided in the kit (7450410). Then reinstall the A-pillar trim panel, and insert the lower Torx head screw and tighten both of them.



STEP TWELVE

Assemble the LINX Gimbal Mount Bracket with the M6 bolts and space washers as shown.

Note: RHD installation shown. For LHD installation shift the bolts across 1 slot.



STEP THIRTEEN

Assemble the LINX Gimbal Mount Bracket with the M6 bolts and space washers as shown.



STEP FOURTEEN

Reassemble the LINX Display Gimbal Mount with the long through bolt inserted from the door side and the thumb nut on the central side. This is ensure there is clearance between the Mount the door when closed.

Note : RHD installation shown. For a LHD installation reverse the installation of the through bolt and thumb nut.



A-PILLAR BRACKET KIT 5 (7450113)



INSTALLATION STEPS

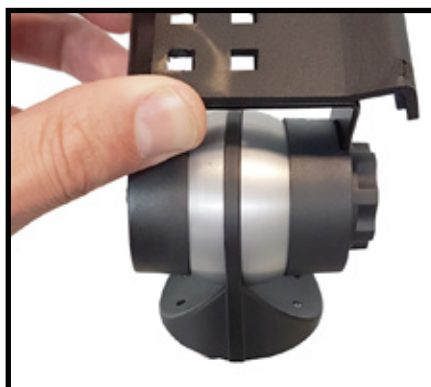
STEP ONE

Expose the A-pillar pinch weld seam by pulling the pinch weld PVC trim away in the area shown.



STEP TWO

Hold the A-pillar Bracket to the LINX Display Gimbal Mount as shown. Note the orientation of the flange relative to the gimbal mount.



STEP THREE

Position the A-pillar Bracket in a suitable location along the A-pillar pinch weld seam. Mark the position with tape.

Note: Consider positioning it as low as practical to avoid any chance of blocking the drivers view of the road, avoiding SRS airbags, but still making sure that the Linx Mount and Display doesn't contact the vehicle dashboard or door trim when the door is closed.



STEP FOUR

Turn the A-pillar Bracket upside down, then hold it on the outer side of the pinch weld seam to mark the position of the holes to drill.

**STEP FIVE**

Drill the holes with a 4.5mm drill bit. Take care not to scratch the A-pillar paintwork with the drill chuck, or drill through into anything that might be located in the A-pillar such as wiring, SRS air bags, plastics, etc.

**STEP SIX**

The Linx A-pillar Bracket must be fixed up against the pinch weld seam, without the plastic trim panel sandwiched in between. Carefully cut the trim panel between the tape marks as shown. **Note:** This cut line will be concealed by the pinch weld PVC trim.

**STEP SEVEN**

Loosely assemble the LINX Display Gimbal Mount onto the A-pillar Bracket using the M6 bolts and nuts provided in the kit and hand tighten.



STEP EIGHT

Then re-position the A-pillar Bracket on the inside of the pinch weld seam, then insert the M4 Torx head screws in from the outside and tighten using a T-20 Torx key or driver bit.

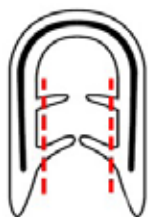
At this step you can also tighten up the M6 nuts securing the LINX Display Gimbal Mount to the A-pillar Bracket and reassemble it.



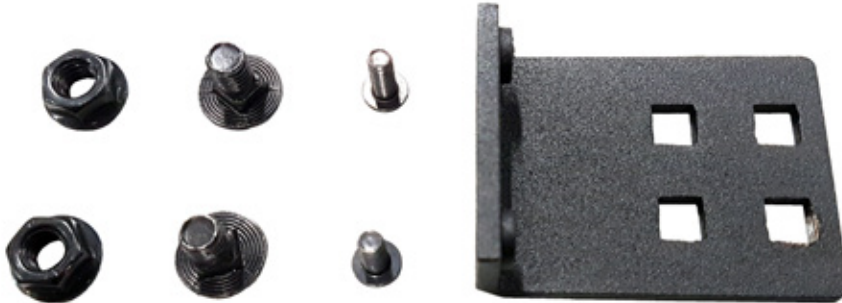
STEP NINE

Complete the installation by reinstalling the pinch weld PVC trim.

Note: to allow the pinch weld PVC trim to sit and flat over the screws, cut away the internal fingers in this area.



A-PILLAR BRACKET KIT 6 (7450114)



For the installation of this bracket follow the same procedure as A-Pillar Bracket Kit 1.

POSITIONING FOR NISSAN NAVARA NP300

It is necessary to assemble the A-pillar bracket and LINX Display Gimbal Mount as shown here.

Loosely assemble them using the M6 bolts and nuts provided in the kit and hand tighten.



The final installation position on a Nissan Navara NP300 is shown here for reference. It is designed to be installed low on the A-pillar without contacting the dashboard.



A-PILLAR BRACKET KIT 7 (7450115)



For the installation of this bracket follow the same procedure as A-Pillar Bracket Kit 1.

POSITIONING FOR TOYOTA TACOMA (2015-ON)

Loosely assemble the A-pillar bracket and LINX Display Gimbal Mount as shown, using the M6 bolts and nuts provided in the kit. Hand tighten.



The final installation position on a Toyota Tacoma (2015-on) is shown here for reference. It is designed to be installed low on the A-pillar without contacting the dashboard.



A-PILLAR BRACKET KIT 8 (7450117)



INSTALLATION STEPS

STEP ONE

The A-pillar bracket is designed to be installed on the lower end of the driver side grab handle. Lever the lower bolt cover off with a small screwdriver.

Note: LHD installation is shown here. Both LHD and RHD brackets are provided in the kit but you only need to use the appropriate one. The LHD bracket can be identified in the picture above by the extra notch.



STEP TWO

Using a 10mm socket, unscrew and remove the bolt that is highlighted in the picture.



STEP THREE

Assemble the A-pillar bracket, spacer and bolt from the kit as shown.



STEP FOUR

Insert the assembly into the pocket that the factory bolt was removed from. The spacer should sit into the round pocket, the profile of the bracket should locate neatly and align the mounting face with dashboard. Tighten with an 10mm socket.



STEP FIVE

Using the provided M6x10mm bolts and flange nuts attach the LINX Display Gimbal Mount as shown.



STEP SIX

Reassemble the LINX Display Gimbal Mount to complete the installation.



A-PILLAR BRACKET KIT 9 (7450122)



For the installation of this bracket follow the same procedure as A-Pillar Bracket Kit 1.

POSITIONING FOR TOYOTA LANDCRUISER 300 SERIES

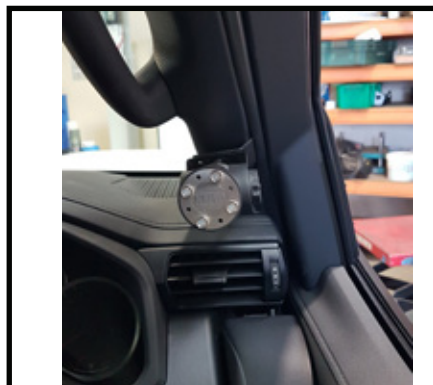
With the door seal removed, position the bracket just above the air vent as shown. Gently pull back on the plastic trim to insert the bracket between the trim and the A-pillar seam.



Mark the position on the side of the seam as shown. Then follow the instructions from Kit 1 step 3, positioning the bracket on the outside of the seam to mark the location of the holes to drill.



The final installation position on a Toyota LandCruiser 300 series is shown here for reference.



A-PILLAR BRACKET KIT 10 (7450123)



For the installation of this bracket follow the same procedure as A-Pillar Bracket Kit 1.

POSITIONING FOR FORD RANGER AND EVEREST (2022-ON)

With the door seal removed, position the bracket just below the thick section in the seam as shown.



The final installation position on a Ford Ranger and Everest 2022-onwards is shown here for reference.



15. TPMS MODULE

The LINX TPMS MODULE provides the capability to monitor ARB Air Systems TPMS sensors. It requires the installation of a LINX TPMS Comms Box (ARB #7450116). It displays the current tyre pressure and temperature. It sounds and displays alerts related to pressure, temperature, sensor low battery and non-communicating sensor. For trailer or large vehicle applications the LINX TPMS Repeater (ARB #7450120) may be required as it extends the range of the TPMS system. Once trailers have been configured LINX will automatically switch between them, or activate/deactivate them when they are connected/disconnected to your vehicle.



● LINX TPMS Comms Box
PART # 7450116



● LINX TPMS Repeater
PART # 7450120

LINX TPMS Module INSTALLATION

The LINX TPMS Comms Box should be positioned in a fairly central location in the vehicle, equidistant from all wheels. This will ensure the best performance from all TPMS tyre sensors. Under the armrest center console is a typically good location. It is a central location and in most vehicles it also has a 12VDC outlet which can be used to power the module. The headliner is also a good suitable location as it provides an fairly unshielded radio path to the wheel sensors. The LINX TPMS Repeater should be installed on or near the tow bar. Some vehicle specific installation positions can be found at:

<https://view.publitas.com/arb-4x4-accessories-1/linx-fitment-guide/page/1>

Secure the LINX TPMS modules in place using at least one of the screw mounting tabs or using cable ties.

Test for a 12VDC circuit that turns on when the vehicle key is the ACC or ON position. The circuit must also be off when the vehicle key is in the off position, hence not a permanent battery connection or else the module will continue to draw power from the vehicle battery when the vehicle is turned off.

Connect the RED wire to this circuit using a suitable method such as an insulated wire tap or solder and tape. A 12VDC power outlet or cigarette lighter socket provides this functionality and is the ideal place to piggy back power from.

Connect the BLACK wire to a vehicle ground.

To connect the LINX TPMS Comms Box to the LINX Display refer to the instructions in the latest LINX Operation Guide.



SPARE PARTS

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LINX SPARE PARTS

Should any component the LINX Kit (LX100) be damaged or lost, spare parts are available under the following part numbers.

LINX Controller ECU - 7450101SP

When replacing the LINX Controller ECU, immediately update the firmware. This is done by connecting the LINX Display to wifi and to the LINX Controller and clicking the 'UPDATE' button in the LINX App.

The LINX Controller ECU stores all the LINX system settings such as which modules are installed, how they are configured, and the vehicle calibration required for the Inclinometer module. If the LINX Controller is replaced then LINX system will need to be re-configured with installed modules, Switchboard module automation settings and vehicle calibration.



LINX Display - 7450502SP

When replacing the LINX Display, immediately update the App. This is done by connecting the LINX Display to wifi and clicking the 'UPDATE' button in the App. The LINX Display stores some customisations such as the names in the Switchboard module, so these will need to be re-named on the new LINX Display.



Battery, LINX Display (serial 18000001 onwards) - 7450502BSP

Battery, LINX Display (serial pre 18000000) - 7450102BSP

LINX Gimbal Display Mount - 7450103SP

The LINX Gimbal Display Mount provide a very secure magnetic mount for the LINX Display that can be finely adjusted for the ideal LINX Display positioning. It can be secured to a LINX A-pillar bracket, or screwed directly to a flat surface on the dashboard if desired.



LINX USB Cable - 7450104SP

The LINX USB Cable is a 3.0m [9.8'] long data and charge cable. It is terminated with a standard USB A plug at one end and a USB micro B plug at the other end. The micro B plug is back angled to suit a minimalist LINX Display installation.



DIN Rail 180mm - 7450210SP

The LINX Controller is designed with an integrated DIN rail clip-on mount. The short length (180mm [7"]) of DIN rail needs to be screwed securely to a rigid part of the vehicle such as a dashboard support bracket. Then the LINX Controller can be simply clipped into place on the DIN rail.



Wiring Harness, LINX Power - 180423

The LINX Power Harness is intended to be run from the battery end which already has the terminals and fuse holder assembled, to the LINX Controller end which is unterminated (terminals are included with the harness). This way the unterminated end can pass through rubber grommets and small holes, and be extended or shortened at the LINX Controller end if required.



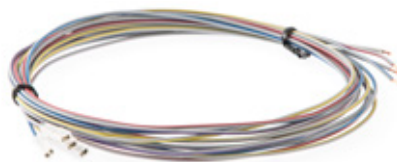
Wiring Harness, LINX Patch - 180420

The LINX Patch Harness allows LINX to patch into the existing ARB Compressor harness. The ARB Compressor harness is separated at the firewall plug and the LINX Patch harness plugs in between the main compressor harness and the switch harness. This provides LINX with pickups from the Air Locker switches, and outputs to control the compressor and Air Locker solenoids. LINX terminals are included with the harness.



Wiring Harness, LINX Inputs - 180426

Four separate pre-terminated wires, for the purpose of connecting the LINX pickups from the Vehicles ACC, parker/low beam, high beam and reverse circuits.



LINX Terminal Kit - 7450105 (10 pieces)

The LINX Terminals are mini quick connect terminal (110 series), with an open barrel crimp. Wire crimper (such as Utilux #147A) suitable for mini open barrel terminals are required to achieve a quality connection.



LINX ACCESSORY PARTS

The following parts are available to make LINX accessory installation easier and some are required for LINX Compressor Pressure Control and Air Suspension module.

LINX Pressure Control Kit - 7450107

LINX Pressure Control Kit contains the following parts which are also available individually :

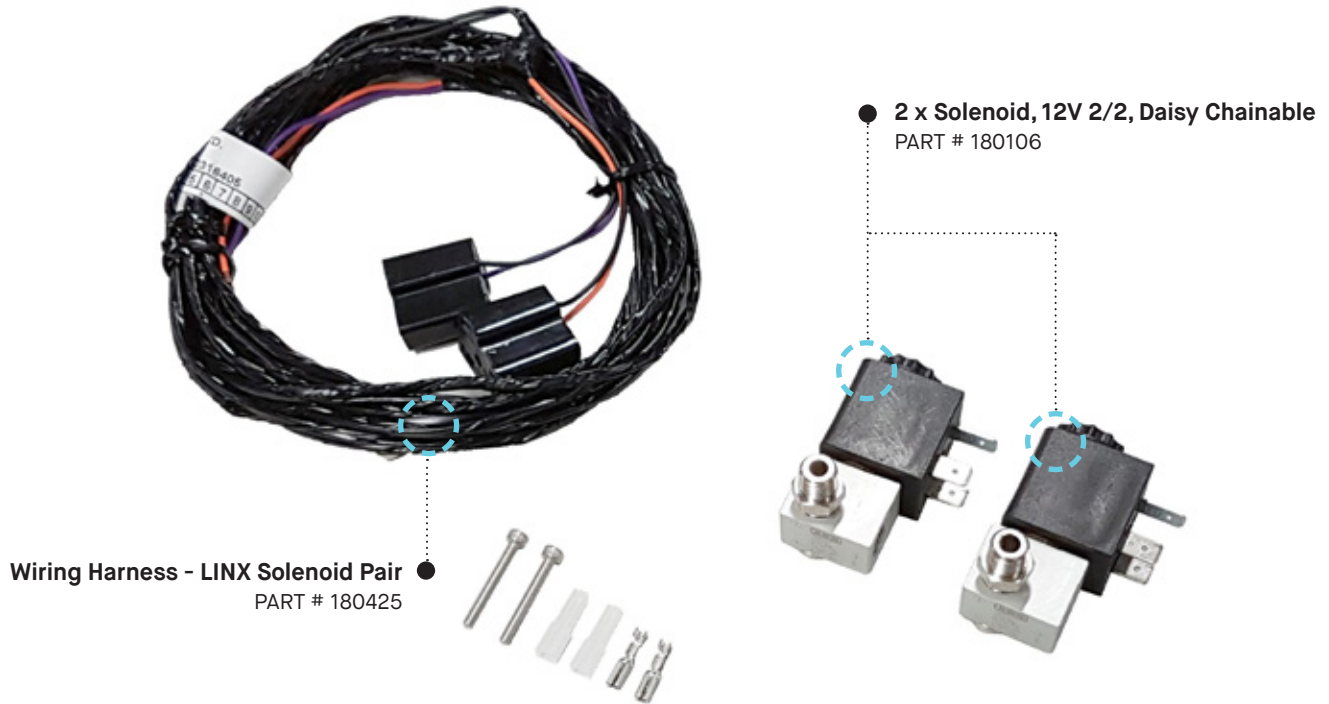
- LINX PRV (Pressure Regulating Valve) - 180105
- LINX Pressure Transducer - 180902
- Wiring Harness, LINX Transducer - 180421
- Wiring Harness, LINX Solenoid Pair - 180425



LINX Air Suspension Isolation Kit - 7450109

LINX Air Suspension Isolation Kit contains the following parts which are also available individually:

- Solenoid, 12V 2/2, Daisy Chainable - 180106
- Wiring Harness, LINX Solenoid Pair - 180425




Wiring Harness, LINX Relay - 180422

The LINX Relay Wiring Harness makes connecting an accessory such as a work light that may not come with its own wiring harness that little bit easier. The LINX relay harness has a standard 40A automotive relay base pre-wired with a 2m [6.5'] long trigger wire to connect to a LINX Switchboard module output, and also pre-wired earth for the trigger, and heavy gauge power wires to supply power to the accessory.

Note: The relay is not provided. You will need to choose a relay that suits your connected accessory such as ARB #CO42 - 12V 40A relay or #180905 - 12V 40A sealed relay





COMPLIANCE INFORMATION

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COMPLIANCE INFORMATION

EUROPE - EU DECLARATION OF CONFORMITY

This declaration of conformity is issued under the sole responsibility of the manufacturer.

This declaration relates to these products:
LINX 1.0

The products are in conformity with the following standards or standardized documents:

ETSI EN 301 489-17 V3.1.1:2017
ETSI EN 301 489-1 V2.1.1:2017
ETSI EN 300 328 V2.1.1:2016
EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013
IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013

According to the provisions of the directives:

2014/53/EU (Radio Equipment Directive)
2014/30/EU (Electromagnetic Compatibility Directive)
2014/35/EU (Low Voltage Directive)

Technical file at:
ARB Corporation Ltd, 42-44 Garden St, Kilsyth, Victoria, Australia

Signed for and on behalf of ARB Corporation Ltd



Andrew Brown
Managing Director
Melbourne, March 2018

USA - FCC STATEMENT

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC CAUTIONS

Changes or modifications made to this device that are not expressly approved by ARB Corporation Ltd may void the user's authority to operate the equipment. This device must not be co-located or operated in conjunction with any other antenna or transmitter.

FCC RADIATION EXPOSURE STATEMENT

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

ENVIRONMENTAL PROTECTION

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

SETUP COMPLETE?

Find out how you can unleash the full power of your brand new LINX device...

[VIEW OPERATIONS MANUAL](#)



THE NEXT GENERATION OF
4X4 ACCESSORIES

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