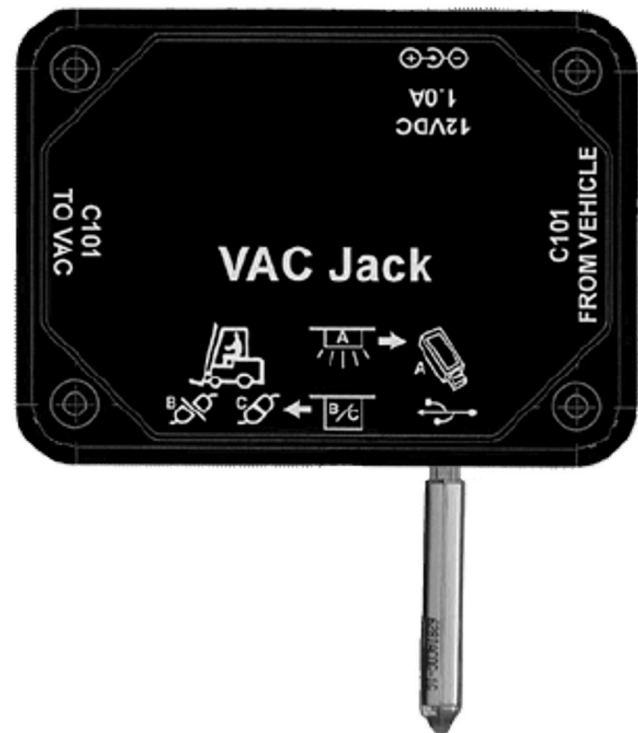




## Lift Link® Device Jack Guide

An operating and troubleshooting guide for the Lift Link® Device Jack.



## **About this Guide**

This Guide provides detailed information on the proper use and maintenance of Mitsubishi Logisnext Americas Lift Link Device Jack.

## **Safety**

The Lift Link telematics solution is not intended for use as a primary safety device. Installation must NOT adversely affect any vehicle safety system or safety device. The installation, configuration and operational procedures provided in this Guide are intended for use ONLY by personnel certified on Lift Link telematics solution installation. It is the user's responsibility to ensure that the procedures in this Guide are completed by certified personnel ONLY, using the proper tools and following the proper safety protocols. The procedures and recommendations in this Guide do not supersede any Federal, State or Local regulations.

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## **Lift Link Device**

The Lift Link Device is the display unit attached to a lift truck, also known a Vehicle Asset Communicator (VAC).

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## Overview

The Lift Link Device Jack allows Lift Link Device updates using an external USB drive and can also be used for troubleshooting Lift Link Device-related vehicle issues without removing vehicle panels and disconnecting wiring.

The Lift Link Device Jack hardware permits an 'in-line' install to the 10-pin (C101) port, located on the rear side of the VAC4 assembly for troubleshooting only. It must be powered via the supplied 12VDC power adapter for firmware upgrades and data synchronization.

## Lift Link Device Firmware Upgrade

For firmware updates, Logisnext periodically releases new firmware files for telematics devices. As those releases are made available, customers are notified by email, verbally by the Logisnext's account team, or via prompt from the Lift Link Portal software interface.

## Exporting Firmware Files From The Lift Link Portal

1. Log into the Lift Link Portal software.
2. Navigate to System Settings page and click the "Edit" button at the bottom of the page.
3. In the Vehicles section, click the "Download Files" button under the "Lift Link Device Upgrade" heading.
4. Click on the "Browse Files" button.
5. Check the boxes next to the Lift Link device versions you need files for.
6. Click on the "Download Files" button.
7. A zip file is created with the selected files in specific folders and subfolders.

- a. P26 folder with sub-folders 1, 2, and 3 for Lift Link device.
- b. P17 with sub-folders 1 and 2 for Lift Link device.
- c. P19 folder with sub-folder 1 Lift Link device.

8. Extract the folders to a location on your computer.

VAC Jack upgrade  
Download Files

Vac Jac File Download			
Available Firmware		<a href="#">Release Notes</a>	
080203D7			
Import Status			
PRODUCT	NAME	SIZE	LAST MODIFIED
VAC04	<ul style="list-style-type: none"><li>• DU10301A.IDS</li><li>• HU70303E.IRF</li></ul>	2273268	03-17-2017 06:37:00 PM
VAC03	<ul style="list-style-type: none"><li>• JU60311C.IRF</li></ul>	1673994	03-17-2017 06:37:00 PM
VAC4S	<ul style="list-style-type: none"><li>• MU30004D.IRF</li><li>• SU10301A.IDS</li><li>• QU80101E.IRF</li></ul>	2059443	03-17-2017 06:37:00 PM

Cancel Download Files

# Using the Lift Link Device Jack to upgrade Lift Link Device Firmware

## STEP 1

Check the vehicle starting firmware version of the Lift Link Device.

## STEP 2

Create USB(s) with files to upgrade the Lift Link Device.

2a. For Lift Link Devices with starting firmware QU80300 or greater, create a single USB with the contents from folder 26, sub-folder 1.

2b. For Lift Link Devices with starting firmware QU80299 or less, create three USBs: One with the contents from folder 26, sub-folder 1; a second with the contents from folder 26, sub-folder 2; and a third with the contents from folder 26, sub-folder 3.

## STEP 4

Insert the USB into the Lift Link Device Jack. For Lift Link Devices where multiple USBs were created, start with the USB with sub-folder 1 contents, then move to sub-folder 2, then sub-folder 3.

## STEP 5

Push the button on the Lift Link Device Jack so it is in position "A."

## STEP 6

Plug the 12VDC power adapter into the Lift Link Device Jack (and plug the adapter into a power outlet). DO NOT power down the Lift Link Device Jack with the vehicle cable for Lift Link Device programming.

## STEP 7

Plug the Lift Link Device Jack into the Lift Link Device's C101 port.

## STEP 8

The Lift Link Device Jack button LED will illuminate while reading data from the USB and programming the Lift Link Device. During this time, the Lift Link Device will indicate programming status via LEDs and on-screen progress messages.

## STEP 9

When Lift Link Device programming is complete the Lift Link Device Jack LED will go off and Lift Link Device screen will return to a normal state (this will take 30 seconds to 3 minutes for the Step 2a and Step 2b).

## STEP 10

Unplug the Lift Link Device Jack from the Lift Link Device's C101 port.

## STEP 11

Unplug the 12VDC power adapter from the Lift Link Device Jack.

## STEP 12

Plug the vehicle cable back into the Lift Link Device's C101 port.

## STEP 13

The Lift Link Device will power up and display the main login screen.

## STEP 14

Select "About."

## STEP 15

At the "About" menu screen, verify that the displayed firmware versions reflect the newly installed firmware.

NOTE: If two different firmware versions are displayed side-by-side, this indicates that the firmware was downloaded but not installed.



## Lift Link Device Programming Wi-Fi Credentials

Wi-Fi Credentials and system configurations can be changed at any time using the Lift Link software System Settings page. For Lift Link Devices with firmware QU80503 or greater, the credentials can be added to the Lift Link Device using a USB and Lift Link Device Jack.

## Exporting Wi-Fi Credentials From The Lift Link Portal Software

1. Log into the Lift Link software.
2. Navigate to System Settings page and click the "Edit" button at the bottom of the page.
3. In the Wi-Fi section, select the profile rules you intend to use:
  - a. Same profile all Lift Link Devices: for all devices to use the same credentials.
  - b. Unique profile per Lift Link Device: for using a different credential for each Lift Link Device (unique usernames or passkeys).
4. Enter Wi-Fi credentials in Lift Link software.
  - a. Same profile all Lift Link Devices: select 'Add Security Profile' if the one you want to use is not already present and complete the required details.
  - b. Unique profile per Lift Link Device:
    - i. If the profiles were already added, select 'Download USB file' and skip to Step 5.
    - ii. If profiles were not previously added.
      1. Select 'Download csv Template' and enter the required credentials into the csv file. For criteria completing the csv file, see Appendix A.
      2. Select 'Import Security Profiles.'
      3. Choose the file you entered the credentials in and select 'Import.'
      4. Select 'Download USB file.'
5. A zip file is created with two files: a .irf file and a .txt file.
6. Extract the folders to a location on your computer but **DO NOT CHANGE** the file names.

# Using The Lift Link Device Jack To Load Wi-Fi Credentials

## STEP 1

Load the 2 files on a single USB.

## STEP 2

Insert the USB into the Lift Link Device Jack.

## STEP 3

Push the button on the Lift Link Device Jack so it is in position "A".

## STEP 4

Plug the 12VDC power adapter into the Lift Link Device Jack (and plug the adapter into a power outlet). Do not power the Lift Link Device Jack with the vehicle cable for Lift Link Device programming.

## STEP 5

Plug the Lift Link Device Jack into the Lift Link Device's C101 port.

## STEP 6

The Lift Link Device Jack button LED will illuminate while reading data from the USB and programming the Lift Link Device. During this time, the Lift Link Device will indicate programming status via LEDs and on-screen progress messages.

## STEP 7

When Lift Link Device programming is complete the Lift Link Device Jack LED will go off and Lift Link Device screen will return to a normal state (takes a few seconds).

## STEP 8

Unplug the Lift Link Device Jack from the Lift Link Device's C101 port.

## STEP 9

Unplug the 12VDC power adapter from the Lift Link Device Jack.

## STEP 10

Plug the vehicle cable back into the Lift Link Device's C101 port.

## STEP 11

The Lift Link Device will power up and display the main login screen.

## STEP 12

Log into the Lift Link Device as a Maintenance operator.

## STEP 13

Navigate to the Wi-Fi > Networks > Lift Link Device Entered screen.

## STEP 14

Validate that the visible network information matches that of the information of the .csv file.

## Vehicle Troubleshooting

Prior to troubleshooting with the Lift Link Device Jack, verify that the vehicle cable and its connection to the Lift Link Device are not affecting vehicle performance. If it is determined that the vehicle may be experiencing performance issues related to the Lift Link Device (such as a valid operator being prevented from accessing vehicles, or blown fuses on the Lift Link Device's vehicle cable), perform the troubleshooting steps below.

### STEP 1

Push the button on the Lift Link Device Jack so it is in position "B/C" (the "out" position).

### STEP 2

Move the Lift Link Device Jack switch to position "C" (Lift Link Device connected to vehicle).

### STEP 3

Unplug the vehicle cable from the Lift Link Device's C101 port.

### STEP 4

Plug the vehicle cable into the Lift Link Device Jack.

### STEP 5

Plug the Lift Link Device Jack into the Lift Link Device's C101 port. The Lift Link Device C Jack's LED should not illuminate.

### STEP 6

Attempt to recreate the issue.

### STEP 7

Move the Lift Link Device Jack switch to position "B."

### STEP 8

Attempt to resolve the issue.

### STEP 9

Try to recreate the issue again.

- a. If the issue is recreated successfully, the Lift Link Device can be eliminated as the cause of the issue.
- b. If the issue does not happen in this mode, it is possible the Lift Link Device is causing the issue.

### STEP 10

Unplug the Lift Link Device Jack from the Lift Link Device's C101 port.

### STEP 11

Unplug the vehicle cable from the Lift Link Device Jack.

### STEP 12

Plug the vehicle cable back into the Lift Link Device's C101 port.



## Appendix A

Wi-Fi Credential USB Criteria when using unique credentials per Lift Link Device. The .csv template contains some sample data. When completing the form, each row in the form represents a single device. Once the USB is created, it can be re-used for all devices identified in the rows of the file.

Column #	Title	Purpose	Criteria
1	MAC_Address*	MAC address of the device	<ul style="list-style-type: none"> <li>Must be MAC address format of: xx-xx-xx-xx-xx-xx</li> <li>Each row must have a unique MAC</li> </ul>
2	VAC_ID*	ID programmed in the Lift Link Device	<ul style="list-style-type: none"> <li>Must be between 00001 and 65534</li> <li>Must match the Lift Link Device ID for the MAC address from column one</li> <li>Each row must have a unique VAC_ID</li> </ul>
3	Facility_ID*	Facility ID assigned to the site	<ul style="list-style-type: none"> <li>Must match site facility ID found in the System Settings page, Server section</li> </ul>
4	Data_Encryption_Type*	Data in transit encryption as defined by the site license	<ul style="list-style-type: none"> <li>Must match license</li> <li>Acceptable entries are: Proprietary, TLS, or Prop + TLS1.2</li> </ul>
5	Server_DNS	DNS name of destination server	<ul style="list-style-type: none"> <li>www.wifivacs.powerfleet.com</li> <li>Enter this OR Server IP, not both</li> <li>Max. 50 characters</li> </ul>
6	Server_IP	IP address of the destination server	<ul style="list-style-type: none"> <li>216.250.138.155</li> <li>Enter this OR Server DNS, not both</li> </ul>
7	Server_Port*	Port used for the site	<ul style="list-style-type: none"> <li>Must match site facility ID found in the System Settings page, Wi-Fi section</li> <li>For TLS encryption should be 4xxxx, for Proprietary should be 5xxxx</li> </ul>
8	Security_Type*	Wi-Fi network security used	<ul style="list-style-type: none"> <li>Acceptable entries are: None, WEP64, WEP128, WPA, WPA2, WPA (Cert), WPA2 (Cert), WPA ENT (no cert), WPA2 ENT (no cert)</li> </ul>
9	SSID*	Network name the devices will connect to	<ul style="list-style-type: none"> <li>Max. 32 characters</li> </ul>
10	Key_Index	Not required	
11	Security_Key_Entry	Not required	
12	Security_Key	Passkey used to connect to the network (non-enterprise)	<ul style="list-style-type: none"> <li>Required for WEP64, WEP128, WPA, and WPA2</li> <li>Cannot be entered for None, WPA (Cert), WPA2 (Cert), WPA ENT (no cert), WPA2 ENT (no cert)</li> <li>Max. 63 characters</li> </ul>
13	Domain_Username	Domain and username used to connect to the network	<ul style="list-style-type: none"> <li>Entered as domain and username separated by “\”</li> <li>Required for WPA (Cert), WPA2 (Cert), WPA ENT (no cert), WPA2 ENT (no cert)</li> <li>Cannot be entered for None, WEP64, WEP128, WPA, and WPA2</li> <li>Max. 63 characters</li> </ul>
14	Password	Enterprise password used to connect to the network	<ul style="list-style-type: none"> <li>Entered as domain and username separated by “\”</li> <li>Required for WPA (Cert), WPA2 (Cert), WPA ENT (no cert), WPA2 ENT (no cert)</li> <li>Cannot be entered for None, WEP64, WEP128, WPA, and WPA2</li> <li>Max. 63 characters</li> </ul>
15	Root_CA	Certificate for network authentication	<ul style="list-style-type: none"> <li>Max. 1500 bytes</li> </ul>

\*Required for all Lift Link Devices



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