



## Gen 2 - Software Release Notes

**Version 1.02**

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# 1 Introduction

This document describes the new features and changes available with version 1.02 software. This document describes changes to the following products: CP640, CP800, CP800M, CP900, and the CANplus Customizer.

## 1.1 Version 1.01

Version 1.01 has been deliberately skipped in order to align all software platforms.

# 2 Linux OS

New Part Number	004_V3_OS_01409
New Part Description	Firmware, Linux OS, Filesystem: 138, Kernel: 3.14.23-168
Filename	004_V3_OS_01409.zip
LOFA Product Application	CP640, CP800, CP800M, CP900

## 2.1 New Features

This section describes the new features that have been added to the firmware.

### 2.1.1 /app/stored folder

/app/stored folder will persist across application updates. Currently this stores the encrypted panel license.

### 2.1.2 Custom busybox binary

This is to provide the LOFA app a mechanism in which it can log events via syslogd.

## 2.2 Bug Fixes

The section describes any bug fixes that have been performed in this release.

### 2.2.1 Updated UART driver

Replaced IRQ-based UART driver to use the IMX FIQ mechanism to bypass the possible IRQ handler error state that could lockup the system.

## 3 Internal IO Board

New Part Number	004-01454
New Part Description	Firmware, Internal IO Board, Version 61
Filename	004-01454.s19
LOFA Product Application	CP640, CP800, CP800M, CP900

### 3.1 New Features

This section describes the new features that have been added to the firmware.

#### 3.1.1 Low-power autostart

Added support to monitor autostart events while panel is in a low-power mode.

## 4 Rotary Board (rev A)

New Part Number	004-01281
New Part Description	Firmware, Rotary Board (rev A), Version 1.01
Filename	004-01281.lfu
LOFA Product Application	CP640

### 4.1 Bug Fixes

The section describes any bug fixes that have been performed in this release.

#### 4.1.1 Config tool hardfault

Fixed issue where the config tool would trigger a EEPROM update which would attempt to reference an uninitialized object, causing the panel to hardfault.



## 5 Base Rotary Board

New Part Number	004-01425
New Part Description	Firmware, Base Rotary Board, Version 2.03
Filename	004-01425.lfu
LOFA Product Application	CP640

### 5.1 Initial release

This is the first release for this product.

## 6 Mechanical Rotary Board

New Part Number	004-01438
New Part Description	Firmware, Mechanical Rotary Board , Version 2.03
Filename	004-01438.lfu
LOFA Product Application	CP800, CP800M, CP900

### 6.1 Initial release

This is the first release for this product.

## 7 CP640

New Part Number	004_V3_APP_01441
New Part Description	Firmware, CP640, Version 1.02
Filename	004_V3_APP_01441.tar.gz
LOFA Product Application	CP640

### 7.1 New Features

This section describes the new features that have been added to the firmware.

#### 7.1.1 Licensing

Panel will display a red screen if an invalid or missing license is detected. At this stage, the panel is practically unusable.



### Updating V1.00 Panels

There are two options:

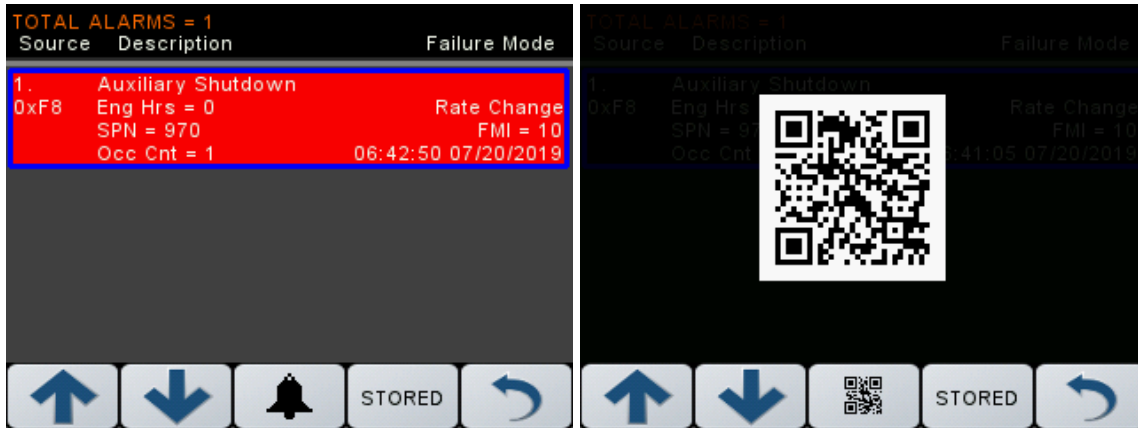
1. Have panel sent back to LOFA.
2. Ask for customer's panel serial number via the about page. Then engineering can generate a special usbupdate package.

#### 7.1.2 Low Power Mode

System will now enter a low power standby mode when key is turned off or display timeout expires

### 7.1.3 QR Connect

Added support for generating QR Connect codes in the faults page.

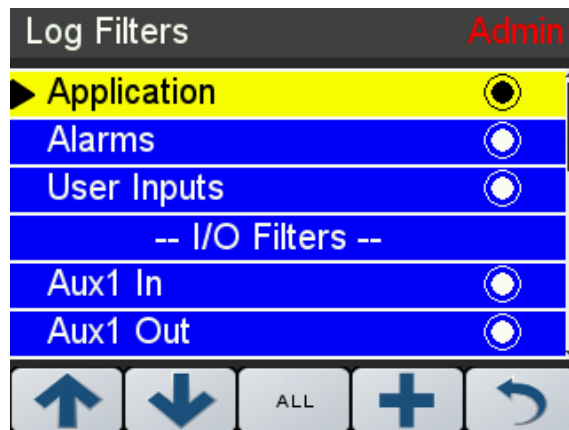


QR code: <https://www.lofa.net/faults/?spn=970&fmi=10&lang=en>

### 7.1.4 Event Logging

Added ability to log events to a USB flash drive. Available via System → Logging.

Also able to filter out events if menu is accessed as an Admin.



### 7.1.5 CAN Tracing

Added ability to sniff CAN traffic and generate a PCAN-compatible trace log file.

Available via System → Logging.

### 7.1.6 Gauge Page selection

Quad gauge pages are now fully customizable via the menus.

Available via Display → Gauges → Quad Gauge Pages → Quadrant Page #

Quadrant Page 1	Tech	Top Left	Tech
		Engine Coolant Temp	<input type="radio"/>
▶ Top Left	Engine Hours	Eng Intercooler Temp	<input type="radio"/>
Top Right	Engine RPM	▶ Engine Hours	<input checked="" type="radio"/>
Btm Left	Engine Oil Pre	Engine Oil Level	<input type="radio"/>
Bottom Right	Engine Coolant	Engine Oil Pressure	<input type="radio"/>
		Engine RPM	<input type="radio"/>
<input type="button" value="↑"/> <input type="button" value="↓"/> <input type="button" value="□"/> <input type="button" value="→"/> <input type="button" value="↶"/>		<input type="button" value="↑"/> <input type="button" value="↓"/> <input type="button" value="□"/> <input type="button" value="→"/> <input type="button" value="↶"/>	

### 7.1.7 DB Viewer

Added more entries to DB Viewer. Now able to quickly access via shortcut, hold button 3 at the gauge pages.

### 7.1.8 Engine Support

Added support for:

- Volvo T3
- Volvo T4F
- Kubota V3 T4F
- Yanmar Stage V

### 7.1.9 System Icons

Most pop-up icons have been replaced to a higher quality color replacement.

## 8 CP800

New Part Number	004_V3_APP_01311
New Part Description	Firmware, CP800, Version 1.02
Filename	004_V3_APP_01311.tar.gz
LOFA Product Application	CP800

### 8.1 Initial release

This is the first release for this product.

## 9 CP800M

New Part Number	004_V3_APP_01395
New Part Description	Firmware, CP800M, Version 1.02
Filename	004_V3_APP_01395.tar.gz
LOFA Product Application	CP800M

### 9.1 Initial release

This is the first release for this product.

## 10 CP900

New Part Number	004_V3_APP_01412
New Part Description	Firmware, CP900, Version 1.02
Filename	004_V3_APP_01412.tar.gz
LOFA Product Application	CP900

### 10.1 Initial release

This is the first release for this product.



# 11 CANplus Customizer

## 11.1 Backward Compatability

**CANplus Customizer v1.02 is NOT backwards compatible with older (v1.00) configs.**

## 11.2 New Features

This section describes the new features that have been added to the CANplus Suite.

### 11.2.1 Support for new products

Added support for CP800, CP800M, and CP900.

### 11.2.2 Config file structure change

The config file (.lfc) structure has been updated to support the newer LOFA API addressing and product versioning.