Release Notes
SD45N – Android

Version 3.5.4.16

This document provides release notes for version android-laird-release-3.5.4.16 of SD45N radio software as well as previously distributed release notes.

Release notes are a summary of new and enhanced features, resolved issues, and known issues that are not resolved in this version. Consult the User’s Guide for details on the features of this software release.

- Software Version android-release-3.5.4.16
- Software Version android-release-1.0.0.11

SOFTWARE VERSION ANDROID-LAIRD-RELEASE-3.5.4.16

Released June 2017

Software part number: SD45ADLT1-170602
OS: Android

Release Package Contents

The release package consists of the following:

- Android LCM to control Laird-specific radio functionality from the Android OS
- Laird-enhanced firmware for the 50 series radios and board calibration file
- Laird-specific wpa_supplicant which provides CCX and driver-specific functionality
- Laird driver backports package

Resolved Issues

Supplicant

- Resolved an issue that caused the regulatory domain to be set incorrectly. (11141)
- Improved detection of incorrect parameters passed into various functions. (11185)

Firmware

- Corrected .11h power constraint handling and removal. (6901, 7147)
- Modified the noise floor update algorithm to consistently pass the ETSI EN300 328 v1.9.1 requirement for short control signaling transmissions during the adaptivity tests. (9540)
- Regulatory updates for FCC. (9194)
- Corrected the supported channels when adopting the KR county code via 802.11d. (7557)
- Corrected issues with CCX RM request handling that could cause the firmware to become unresponsive. (5887, 7542)
- The ar6003 firmware will no longer roam from a good AP for an AP with signal strength less than -96dBm. (7363)
- The firmware will no longer mark an AP as bad if connected and a deauth is received from the bss. (7107)
- RSSI values of roam candidates are now weighted heavier than the RSSI average when the roam table is updated from Ack packets (in response to our probe request) and beacons/probe responses heard during scans (background and foreground). (7141)
- The firmware no longer allows beacons received on the side channels to update the roam table RSSI values in the 2.4GHz band. (7141)
- Corrected the channel list for Russia (RU). (10548)
- Added optimizations to the country IE tracking capabilities.
- Channel 1 (2412) is no longer missing from the channel list after certain host initiated scans. (8807)
- On an initial connect, the radio will no longer connect to an AP with a signal strength below the roam threshold unless there are no better APs available. (5784)
- The firmware no longer calculates the TCP checksum. (8011)
- When configured for WW mode and initially adopting a regulatory domain via 802.11d, the radio will now periodically check the country codes being advertised in beacons in its environment and update the regulatory domain as needed. (7804)

**Known Issues**

**Firmware**

- CCX features cannot be disabled. (4470)

**LCM**

- When creating a PEAP profile using the LCM on KitKat, the inner method cannot currently be configured. (9248)

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**SOFTWARE VERSION MSD45-LAIRD-1.0.0.11**

*Released July 2014*

**Software part number:** SD50ADLT1-140723  
**OS:** Android

**Release Package Contents**

The release package consists of the following:

- Android LCM to control Laird-specific radio functionality from the Android OS  
- Laird-enhanced firmware for the 45 series radios and board calibration file  
- Laird-specific wpa_supplicant which provides CCX and driver-specific functionality  
  
  **Note:** CCX is disabled for this GA1 release; full CCX support is planned for the GA2 release.
Required hardware and software integration guides for reference

New Features

The following are the primary features of the 1.0.0.11 build

Android LCM

- Allows full, detailed, and streamlined configuration of all natively-supported security types
- Provides up-to-date status and connectivity information
- Allows control of Laird-specific Wi-Fi configuration variables

Android WPA Supplicant

- Includes Laird-enhanced security
- Improved standard WPA supplicant roaming capabilities for Android
- Allows Laird-specific driver configuration to be used in tandem with the Android LCM

Known Issues

LCM

- Altering phase2 profile authentication causes a password reset – Changing the phase2 authentication of a previously connected configuration causes the password field to reset; the password must be re-entered to connect. (5561)
- LCM fails to update connection frequency on the Advanced tab – The frequency only displays once when the tab is opened but after the initial display, the frequency does not actively update. Selecting a different tab and then returning to the Advanced tab provides an up-to-date frequency display. (5967)

General

- CCX is disabled for this GA1 release – Although unavailable for this release, full CCX support is planned for the GA2 release.