5100/5300 ES 16.1 Subscriber Software Release
Effective Release: 02/25/16
FSN-0416-ESS153-03

This Field Software Notice serves to introduce EFJohnson’s newest subscriber software version 16.1 as a replacement for version 11.1. The 16.1 software should be used with radios using application software code release 6.18.x (portables and mobiles).

Users with radios utilizing previous ES application code should refer to the compatibility matrix listed on page 2.

<table>
<thead>
<tr>
<th>Platform</th>
<th>5100 ES Portable, 5300 ES Mobile</th>
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<tbody>
<tr>
<td>Protocol</td>
<td>All</td>
</tr>
<tr>
<td>Version Release</td>
<td>16.1</td>
</tr>
<tr>
<td>5100 ES Flash Version</td>
<td>6.18.0</td>
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<tr>
<td>5100 Express Code Updater</td>
<td>6.18.0 (part #023-9998-53217)</td>
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<td>Supercedes Version</td>
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### Revision Information

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<th>Version</th>
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<tr>
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<td>PC Tune</td>
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<td>SMA</td>
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<td>RFX</td>
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#### 16.1 Software Release - Resolved Issues

**Support for Viking Control Head**
Add supports to the new color Viking Control Head.

**WUID Inactivity Timer Not Working Correctly**
Fixes the inactivity auto-re-affiliation timer.

**Radio Can Get Stuck on Non-selected System When Turning Off Radio Wide Scan**
If the user is scanning two P25 Trunking systems and the user turns RWS off when the radio is scanning the non-selected system, the radio will go OOR.

**11.1 Mainline 5300ES SMU Lock-up While TXing on Busy TG**
Problem occurs if you send a status update from an SMU and the SMU talkgroup is busy, the radio locks in a condition where you cannot PTT from the microphone.

**Add Horn Honk to Conventional Call Alert - Mobile only**
Added Horn Honk support for P25 Conventional Call Alert.

**Feature Implementation: Single Touch - 5100ES and 5300ES**
Allows a user to send a pre-programmed status at the press of a button. Since this a press and hold function a new display message was added to display “Press & Hold” when the button is only pressed but not held. The Single Touch button is only available in P25 Trunking and currently supports only status.

**Location Services**
Added location services capabilities to provide the GPS location information to the radio user and network administrators using a standardized IP based protocol.
**SZ Digital Interconnect Does not Work When Dialing More Than 10 Digits**
Fixed issue where the CRC was calculated incorrectly when the number of digits was greater than 10.

**SNSZ Patched Calls in State Group Call Busy not TXing or RXing When Channel Grant Received**
When Viking radios were transmitting on a patched TG and were put in the busy queue by the system, they were unable to TX or RX until the busy timer timeout occurs.

**2011R1 Point Release - Mid/Bright LCH Display Transmits Buzzing Sound in Low Voltage Conditions**
Having a LCH programmed with the backlight set to mid or high while transmitting in low voltage conditions causes a buzzing noise to be transmitted to the receiving radio.

**Add the Ability to Disable the Unprogrammed Tones**
Allows the ability to disable an unprogrammed tone.

**Auto Unmute - New Feature**
If user’s radio is muted, this feature will automatically unmute the radio if certain programmable events occur.

**KVL 4000 Does Not Work with ES Radios**
Fixed issue with KVL4000 not working on ES radios.

**New Mic Gain Levels**
Adjusted gain levels on microphones.

**11.1 Hard Key Only Security Improvements**
If a parameter file without hard key support ends up on a radio, the software will fail the enabled self-test hardkey only option in order to keep older versions of PCC from putting modified files onto radios running this software.

**Enforce the System and WACN IDs in Short Hunt**
Addresses issues if overlaid P25 systems are reusing frequencies.

**Modify the EFJ Affiliation System to Work with Dynamic Registration**
Radio will now wait for a data registration response if it receives an ack at the data layer for an EFJ dynamic data registration packet. If it does not receive a data registration response, the data registration attempt fails with no retries.

**Tx Echo issue**
Fixed an issue where ES and Viking radios occasionally unmute at the end of their own call on 2600 CSNI channels.

**IP Indicator 5100 ES Does Not Refresh After Roaming to Non-data Site**
Allows for an immediate update of the IP address icon after leaving a data enabled site and registering on a site without data enabled. If a subscriber is given an IP address, the IP address icon is displayed immediately.

**Call Alert Interrupt Feature Does Not Work**
Fixes an issue where the Call Alert Interrupt Feature does not work due to an unhandled message in the trunking manager, in the group call traffic state which causes the feature to fail.

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**How to tell if you have an ES radio:** There is a number 6 at the beginning of the application code. When you turn on a portable radio the first series of numbers on the display will be the application code (example 6.12.4). When you turn on a mobile radio the second series of numbers on the display will be the application code. (The first set of numbers will be the control head version.)

**How to obtain PC Configure:** Customers with a PC Configure software subscription will find the latest version in their share drive. Customers without a subscription will need to place an order. (Contact orders@efji.com to place an order.)

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For questions regarding this Field Software Notice, please contact EFJohnson at 1.800.328.3911, option 3

www.efjohnson.com