



## Radio Dispatch Engineering Group

### IP-224 Version 1.200 Engineering Release Notes

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### Revision History

Revision	Date	Author	Description
1	05/07/12	Radio Dispatch Engineering Group	Version 1.000 Release
2	08/31/12	Radio Dispatch Engineering Group	Version 1.100 Release
3	02/18/13	Radio Dispatch Engineering Group	Version 1.200 Release

### Overview

These are the release notes for the IP-224's firmware version 1.200. Cross application compatibilities are outlined in this document.

### Important

After upgrading from a previous firmware revision to version 1.200, the unit will reboot and begin the process of updating the system components to the new BCH ECC method. During the update process, the unit will display "Firmware Upgrading". This update process takes approximately 1 minute, after which the unit will self-reboot and operate normally. **Ensure that the unit completes the update cycle and boots normally before removing power from the unit.**

After the IP-224 firmware has been successfully upgraded to version 1.200, the firmware cannot be reverted to any previous version (1.102 or earlier). Any attempt to downgrade the firmware version via TSM will be refused by the IP-224.

### New Features

#### Version 1.200

- Added Handset and IP Intercom functionality.
- Added a TX IP Input (C-Soft transmit) VU meter.
- Added the ability to clear the Additional Features. Type "RESET" in the Additional Features -> Access Key dialog.
- Added a jump to beginning, previous 10, next 10, and jump to end buttons for the Per Line Setup -> Function Tone Setup.
- Updated the U-Boot bootloader and the Linux Kernel to support BCH ECC for the flash memory.

### Feature improvements and known issues fixed in this release

#### Version 1.200

##### **Fleetsync & MDC 1200 – Over the Air**

- Fixed numerous issues with Fleetsync and MDC 1200 Individual and Group calls sending the incorrect User ID, Calling ID, and Status ID to C-Soft.
- Fixed an issue where the IP-224 would send both Serial Fleetsync ANIs and Over-the-Air Fleetsync ANIs to C-Soft.
- Fixed an issue where the IP-224 wasn't sending Fleetsync and MDC 1200 Encode messages correctly: Fleetsync Request Status, Fleetsync SelCall, Fleetsync Status, Fleetsync Text, MDC 1200 Call Alert, MDC 1200 Emergency, MDC 1200 Radio Check, MDC 1200 Radio Enable/Disable, MDC 1200 Remote Monitor, MDC 1200 Status Request, and MDC 1200 Select Call.
- Fixed an issue where the IP-224 was sending a status value of '0' to C-Soft for MDC 1200 Radio Check Acknowledgement, MDC 1200 Radio Enable/Disable Acknowledgement, and MDC 1200 Call Alert Acknowledgement.

**Local Mode: Serial Type – EF Johnson 5300**

- Fixed an issue where the IP-224 would randomly lose serial radio control if 2 EF Johnson radios were connected to a single IP-224. This issue occurred because a thread in IP-224 was getting the wrong state of the EF Johnson RS-485 busy line.
- Fixed an issue where old versions of EF Johnson radios (version 6.12.11 or earlier) couldn't be controlled serially.

**Local Mode: Serial Type – Kenwood X**

- Fixed an issue where the Kenwood x80 wasn't sending the correct encryption state.
- Fixed an issue where the Kenwood x80 could be on the wrong channel after rapidly changing channels in C-Soft.
- Added code to remove the Kenwood x90 from CAD mode when rebooting from the display, rebooting from the webpages, or when reflashing the IP-224.
- Fixed an issue where the Kenwood 5x10 would send User ID information to C-Soft when it was transmitting.
- Fixed an issue where the User ID for Kenwood 5x10 P25 individual calls was incorrect.
- Fixed an issue where Kenwood NXDN status messages would cause blank entries in the C-Soft Per Line Call History Window.
- Fixed an issue where Kenwood NXDN digital status messages wouldn't update the channel in C-Soft while the radio was scanning.
- Fixed an issue where the Kenwood NXDN wouldn't revert to the first enabled channel after getting the scan list.

**Tone Mode:**

- Fixed an issue where the tone audio could become choppy.
- Fixed an issue where Parallel Tone Console's transmit audio to C-Soft would drop with LAM.
- Fixed an issue where PTT wouldn't release for 5 seconds if TX Delay was set to 0 msec.

**Webpage Configuration:**

- Fixed an issue where all the Function Tones could get disabled.
- Fixed an issue where the Boot Up Frequency could be changed to a disabled Function Tone.
- Fixed an issue where Auto Configuration wasn't changing the RX Input gain back to 0 dB.
- Fixed an issue where Digital Output values weren't reinitialized after Saving Webpage Parameters.
- Fixed an issue where the Function Tone and Monitor Relays weren't reinitialized after Saving Webpage Parameters.
- Fixed an issue where the Packet Delay wasn't reinitialized after Saving Webpage Parameters and the IP-224 would not transmit until the unit was rebooted.
- Removed a duplicate entry for MDC 1200 Encode from the Additional Features webpage list.
- Removed an extra dropdown box on the Tone Mode: Per Line Setup -> Function Tone Setup.
- Added a "Features are now available. Save Parameters step still required" comment after enabling Additional Features.
- Updated Copyright to 2013.

**Miscellaneous**

- Fixed an issue where Unicast addresses wouldn't function properly.
- Fixed an issue where the IP Recorder multicast audio could become choppy.
- Fixed an issue where PTT timeout wasn't working with TX IP (C-Soft transmit) traffic.
- Fixed an issue where PTT key down time could vary from 0 to the Packet Delay \* 20msec.



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- Increased the volume to the handset speaker.
  - Fixed an issue where the handset speaker audio wasn't getting muted while transmitting in 2-wire mode.
  - Fixed an issue where the TX LED wasn't getting shut off correctly when IP Recorder multicast was enabled.
  - Fixed an issue where alignment tones weren't always getting shut off correctly.
  - Fixed an issue where TSM wouldn't always record settings to an IP-224.
  - Fixed an issue where the Monitor Relay wasn't working in Local Mode: Serial Type – Normal and Tone Mode.
  - Fixed an issue when the Digital Output value was set to 256 it wasn't holding the previous Function Tone's Digital Output value.
  - Fixed an issue where the IP-224 fails to reboot after a firmware upgrade if the user closes TSM during the upgrade process.

### **Compatibility**

#### C-Soft Application

- Version 6.200+

#### Telex System Manager

- Version 1.500+

### **Installation and Upgrade**

Please use Telex System Manager 1.500 or newer to upgrade the firmware.