

## Firmware 1.4 Release Notes

The following document is a list of features implemented with the latest CrewCom® firmware release.

### Firmware Details:

<b>Version</b>	1.4.0.2
<b>Release Date</b>	August 19, 2019 (Document updated on November 19, 2019)
<b>Affected Models</b>	CRP-22-900, CRP-22-900AN, CRP-44-900, CRP-44-900AN, CRP-22-2400, CRP-22-2400CE, CRP-44-2400, CRP-44-2400CE
	CRT-900, CRT-900AN, CRT-2400, CRT-2400CE
	CCU-22, CCU-44
	CHB-8C, CHB-8C-02, CHB-8F

*Compatibility Note: To work together as a system, all connected devices must have firmware that matches the version installed on the Master Control Unit.*

### Device Parameters:

CrewNet supports the following:

- Up to 4 Control Units (CUs)
- Up to 72 Radio Packs (RPs): 4 CUs × 18 RPs per CU
- Up to 16 Radio Transceivers (RTs): any combination of 2.4 and 900\*
- Up to 2 layers of Hubs when using at least one Fiber Hub (See Feature Notes for more information on Hub layers.)
- Up to 4 layers of Hubs when using only Copper Hubs (See Feature Notes for more information on Hub layers.)
- Up to 32 wired intercom/audio channel inputs (maximum of 16 2-wire and 16 4-wire across 4 CUs)
- Up to 64 Profiles
- Up to 64 Conferences

*\*Maximum of 14 900 MHz RTs on any single system (out of 16 total RTs). CRT-900-AN (Oceania) model operates within the 915–928 MHz frequency range and supports a maximum of 7 900 MHz RTs on a single system.*

### Feature Notes:

- The Master CU is the control host for the CrewWare application via the LAN port.
- Audio supplied to Aux In can be assigned to any combination of up to 10 possible conferences. Audio supplied from Aux Out can be assigned from any single conference.
  - » Each CU may have a separate Aux In, for a total of four when using four CUs.
- Up to 4 Copper Hub layers can be configured. The number of Hub layers is defined by how many Hubs are between the device and the Master CU.
  - » When using one or more Fiber Hubs (CHB-8F), the system will be restricted to a maximum of 2 Hub layers (Hubs of either type).

- The following functions are not yet supported: GPO Relays, Ping, High Density mode, User Access Rights management, hardware Mic Kill, and CrewWare multi-client access to one system.
- The following CU menu options are not operational: Sync Priority, Device Settings (CU menu), RT Hopping Patterns, and RT Radio Band; however, these settings can be managed via CrewWare while offline (requires save/upload of new CrewCom Configuration File (.ccf)).
  - » By default, the first Control Unit added to the CCF is automatically assigned the Master sync priority. Every CCF must contain one Master Control Unit. Secondary and Tertiary sync priority assignments are not currently operational.
- Out-of-the-box dynamic configuration of hardware is not yet supported. CrewWare is required to build a configuration file (.ccf).

## Enhancements

- Added product compatibility for Fiber Hub and for future Drop-In RP Charger models when available.
- Improved the RP battery charging telemetry to support charging via drop-in RP charger
- Updated roaming protocol to improve roaming performance
- Resolved issue related to CrewWare exhibiting slow responsiveness
- Various bug fixes to improve system performance

## Operational Notes

### Firmware Updates

- The user will need to disable the Windows firewall in order to install CrewWare.
- When updating firmware from previous versions via USB, devices may require additional rescan. See the “How to Update Firmware via USB” tutorial and/or the CrewWare Manual for further detailed instructions on this process.
- When updating firmware from any version older than 1.1, Pliant recommends an incremental firmware update to version 1.1 before updating to version 1.4.
- Following system firmware updates, a complete power down and restart of system is recommended. Upon restart, Radio Transceivers will finish updating the radio. Depending on the update, this may be evident by alternating flashing of the RX and TX LEDs. Once each RT's RX and TX LEDs return to normal, the device is ready. See the “How to Update Firmware” document and/or the CrewWare Manual for further detailed instructions on this process.
- When updating RT firmware via CrewNet, a communication warning system status can be generated. Clear this message by disconnecting and reconnecting CrewWare. It may be necessary to power cycle all CUs, RTs, and Hubs before attempting to update firmware again.

### Configuration and Startup

- If updating from firmware version 1.1 or older, you must save your CCF in the new version to match existing settings to added features. Do so with the following steps:
  1. After updating device firmware, connect CrewWare to your CU via LAN connection, and go “live.”
  2. In CrewWare, click **File** then **Save File As...**; then select a file location, name your file (8 characters or less), and save it. This CCF is now updated.
  3. In CrewWare, click **File** then **Upload File...**, then navigate to your saved file (.ccf) and choose it. Follow the CrewWare and CU prompts to upload the file and restart your system.
- Adding and removing devices (such as an RT) in live mode (often referred to as “hot-plugging” or “hot-swapping”) may cause system errors to occur. Pliant recommends only performing this type of action when the system is powered off.

- Upon startup, non-Master CU(s) (if applicable) may require up to 60 seconds to complete the CCF load. The LCD screen will display load progress messages during this time.
- Any change to RF parameters such as hopping pattern or radio band will require RPs to be repaired.
- To avoid an RP going inactive, Pliant recommends ensuring your CUs and RTs are powered on and ready prior to powering on the RPs. An RP will enter inactive mode if it cannot establish communication with an RT. If an RT becomes available, an inactive RP can be prompted to attempt to re-establish communication by pressing the RP Menu button.
- Changes to CU short or long name made locally from the CU display will not be reflected in CrewWare. To see this change reflected in CrewWare, disconnect and reconnect CrewWare.
- Pliant recommends that Hubs be externally powered with local power supply (provided).
- For Fiber Hubs, use of Port 1 (either copper or fiber) is required for downstream operation of Ports 2–8.

## LAN Settings

- When changing LAN settings from the CU front panel, a reboot is required before operation. Pliant recommends waiting about 60 seconds after making the change before powering off the CU.
- Pliant recommends connecting cable to the CU's LAN port prior to powering on the CU. In the event the LAN cable is disconnected during use, we recommend power-cycling the CU once cable has been reconnected.

## CrewWare Interface

- CrewWare's "Device Management" tab does not currently populate with the accurate Radio Version or Powered By data (for RTs). This does not affect operation.
- CrewWare Event Log entries can fail to display a device's latest firmware change. If the device is not operating properly, rescan to ensure device firmware matches system firmware.
- CrewWare's CCF Display Name (visible on the System Diagram left-hand navigation pane) does not currently update automatically when the CCF file is saved with a different name and reopened. The user can change this Display Name by going to the **Edit** menu, selecting **Diagram Preferences**, and then entering a new name in the **Display Name** field on the dialog box that displays.
- The Call button on CrewWare's Radio Pack list view ("Device Management" tab) is not currently implemented.