

Software & Firmware 1.10 Release Notes

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

Firmware Details:

Version	1.10
Release Date	April 2022
Affected Models	CrewWare Software Application
	Radio Packs: CRP-22-900, CRP-22-900AN, CRP-44-900, CRP-44-900AN, CRP-22-2400, CRP-22-2400CE, CRP-44-2400, CRP-44-2400CE
	Radio Transceivers: CRT-900, CRT-900AN, CRT-2400, CRT-2400CE
	Control Units: CCU-22, CCU-44
	Hubs: CHB-8C, CHB-8C-02, CHB-8F
	Drop-In Charger: PBT-RPC-66

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

Device Parameters:

CrewNet supports the following:

- Up to 4 Control Units (CUs)
- Up to 72 Normal mode Radio Packs (RPs): 4 CUs x 18 RPs per CU
- Up to 256 High Density mode RPs: 4 CUs x 64 RPs per CU
- Up to 6 Normal mode RPs per Normal mode Radio Transceiver (RT)
- Up to 32 High Density mode RPs per High Density mode RT
- Up to 16 RTs: any combination of 2.4GHz and 900MHz*
- Up to 4 layers of Hubs: any combination of copper and fiber devices (The number of Hub layers is defined by how many Hubs are between the device and the Master CU.)
- Up to 32 wired intercom/audio channel inputs (maximum of 16 2-wire and 16 4-wire across 4 CUs)
- Up to 125 Profiles (Any mix of Normal mode and High Density mode)
- Up to 64 Conferences (Up to four assigned specifically for High Density mode)
- Up to 160 Relay Assignments
- Aux In audio assigned to up to 10 Conferences
 - » Each CU may have a separate Aux In source, for a total of four when using four CUs.

- Aux Out audio can be assigned from any single Conference.
 - » In a multi-CU system, this is a single Conference per Control Unit.

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

	Normal Qty.	HiDen Qty.	System Total	Notes
Profiles			125	Any mix of Normal or HiDen
Active Pairings per CU	18	64		
Packs per RT	6	32		
Total Packs per System	72	256	328	

New Features

- Auto-Configuration: Auto-Configuration allows for easy step-by-step initial setup of the CrewCom system without using CrewWare.
- High Density: High Density Operational Mode greatly increases the overall number of users on a CrewCom system by allowing RP profiles and RTs to be set into a mode that allows for up to 32 RPs to log into a single RT where any 4 of those users can communicate in full duplex.

Enhancements

- Improved Speed of CrewWare Software Application
- New Profile Defaults: RP Profile Defaults have been updated to be more user friendly.
- The “Restore Profile Defaults” function now restores default users settings without a profile being reapplied, therefore no longer resulting in a temporary loss in audio.
- Sync In Status Indication: In addition to the current LED indication near the Sync In connector on the CU, now the Sync In Status Indicator is visible in the CrewWare Software Application and on the front LCD screen of the CU.
- Profile Change Messaging: A new check box labeled "Don't show this message again." has been added to forego any future warning messages regarding Radio Pack communications being temporarily interrupted.
- RP Summary: The CU menu now specifies the number of Radio Pack Pairings and Active Connections to the CU for both Normal and High Density Mode RPs.
- Hardwire Default Levels: 2-Wire Default Set to Zero
- Updated RP Summary and RP List Views to now show RSSI, LQ, and Battery Status. Columns were reordered on both RP Summary and RP List Views to be more user friendly.
- IP Soft Reset: The system now resets the LAN settings automatically without needing to reboot or power cycle the CU.
- Auto Reboot CU: The CU will now reboot automatically after a CCF is loaded and after firmware is updated.
- Mic Kill: CrewWare can now initiate a mic kill signal on all packs on a conference as well as applicable 2-Wire intercom ports.
- Updated CU configuration file display that now shows “Primary” and “Non-Primary” next to the CCF file name. This allows the user to easily identify Primary versus Non-Primary CUs.
- General bug fixes and enhancements to user experience.

Operational Notes

IMPORTANT: Firmware Updates

- The fixes included in this version of 1.10 apply to all CrewCom devices except the 6+6 Drop-In Charger; therefore, it is not required to update the charger as long as it is already using version 1.8.0.12 or higher. However, if you do choose to update the charger, no harm to the device or system functionality will occur.
- A system's configuration file (CCF) does not need to be reloaded after updating the RT(s) and RP(s) to 1.10.
- RPs do not need to be re-paired after updating to 1.10.
- When updating firmware from version 1.2 or older, Pliant recommends an incremental firmware update to version 1.4 before updating to version 1.10. Updating directly from version 1.3 to 1.10 is supported. Previous versions of CrewWare can be found here: <https://plianttechnologies.com/firmware-previous-crewcom>
- When applying this update to a CU with version 1.4 or older, an additional file upload directly to the CU (via front panel USB) will be required. Upon clicking "Scan for Devices" in CrewWare's firmware tab, you will find step-by-step instructions for this process. This additional (two-stage) update is not required when applying this update to CUs with version 1.8 or later.
- If updating from firmware version 1.2 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.

Configuration and Startup

- **IMPORTANT:** For best system performance with no interaction between Radio Transceivers (RTs) in a mixed (Normal & High Density) system it is recommended that Normal-mode RTs and High Density-mode RTs be separated by at least at 80 feet (24 meters) or greater for 900MHz products and 60 feet (18 meters) for 2.4GHz products. It is possible to operate with less physical separation; however, overall range may be affected as the distance of separation is decreased.
- While this release does add an auto configuration function, out-of-the-box dynamic configuration of hardware is not yet supported. CrewWare is still required to build a configuration file (.ccf) if a customized system with hubs and/or more than three RTs is needed.
- 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.
- CUs may only be daisy-chained when connected directly from the primary CU.
- Upon startup, non-primary CU(s) (if applicable) may require up to 3 minutes and 30 seconds to complete the CCF load (shorter for smaller CCFs). The LCD screen will display load progress messages during this time.
- The time required to load a CCF, push edits to multiple Profiles, and configure CrewNet devices may vary depending on configuration size.
- Any change to RF parameters such as RT operational mode (Normal/High Density), hopping pattern, or radio band may require RPs to be re-paired. This is not true for Transmit Power or Antenna Diversity.

- 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 (triangle) button.
- 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

The Master CU is the control host for the CrewWare application via the LAN port.

- When changing LAN settings from the CU front panel, a reboot is no longer required.
- In the event the LAN cable is disconnected during use, we recommend waiting at least 60 seconds after the cable has been reconnected before reconnecting to CrewWare.

CrewWare Interface

- The Call button on CrewWare's Radio Pack list view ("Device Management" tab) is not currently implemented; however, the Call function is functional elsewhere.
- Once an RP is paired to a system, it populates in the Real-Time Pack View's inactive panel. When an RP is turned on, it moves to the active panel; these RPs remain in the active panel until CrewWare has been disconnected or closed, regardless of whether the RP is turned off.

The following function is not yet supported: CrewWare multi-client access to one system.

Pliant Technologies, LLC
205 Technology Parkway
Auburn, Alabama 36830 USA
www.plianttechnologies.com
Phone +1.334.321.1160
Toll-Free 1.844.475.4268 or 1.844.4PLIANT
Fax +1.334.321.1162