How To Pair Radio Packs

RPs must be paired to a Control Unit (CU) before they can operate with your X-System. Once RPs are paired to a CU, this process does not need to be done again unless the RP is being paired to a new or different CU (for example, after a replacement is made for repairs). An RP may be paired without installing a battery, if required. In this case, the CU will provide power to the RP during the pairing process. If no battery is installed, the RP will power down as soon as it is disconnected from the CU.

- **Compatibility Note:** To work together as a system, all connected devices must have firmware that matches the version installed on the master CU. See the "Updating Device Firmware" section of your system Operating Manual for more information on this process. Call CoachComm Customer Support if you require assistance with updating your system firmware.

- **Limit of Active RPs for systems with more than three Radio Transceivers (RTs)**: A maximum of 18 900MHz and 18 2.4GHz RPs may be active on X-System because each RT allows 6 RPs. Since only 18 RPs can be active on a single CU, you should pair 900MHz RPs to the top CU, and pair 2.4GHz RPs to the bottom CU. If you have more than 18 RPs in either frequency, you can pair the extras to the appropriate CU, but those extras will not display as "active" until you remove one of the original 18 active RPs.

You will need the following:

- One USB-A-to-Micro-B cable

Pairing Steps:

To pair your RP, use the following steps. *IMPORTANT*: While pairing, do not disconnect the RP until you are instructed to do so.

1. Connect the RTs to the appropriate port on the rear of your system. Then, power on the CUs.

2. When prompted on the CU(s), select either **Home** or **Away**. Wait about 2 minutes for the configuration file to load on the system—*all* CUs will display a "CCF Loaded" message and a configuration file summary during the load process—wait until this message has cleared from all screens before taking further action. Once the message times out, the home screen will display on the front of the CU(s).

CCF Loaded

Version: 3	Flags: 02	Length:	21,232	Number of Devices: 8
Device Connection: 7		Control Unit: 2	Expansion: 0	Hub: 0
Radio Transceiver: 6		Radio Pack: 36	Radio Pack Profile: 36	
Conference: 12	Relay Assignment: 0		Aux Audio Assignment: 0	
User Info Record: 0		Access Rights:	0	UI Data: 0

CCF Loaded Screen

3. Ensure the RP to be paired is powered OFF.

   IMPORTANT: *If your system supports both 900MHz and 2.4GHz devices, you should pair 900MHz RPs to the top CU and pair 2.4GHz RPs to the bottom CU, since only 18 RPs can be active on a single CU.*

4. Connect a USB-to-Micro-USB cable from the master CU to the device (micro end goes into the RP's USB port beneath its rubber port cover). The RP will power on by itself. Pairing begins automatically and should take about 30 seconds.

5. When prompted, use the RP volume knob and function buttons to choose a Profile from those available in the list on the RP's LCD.

6. Wait for the Profile to load. The RP LCD will display a "Pairing Complete" message when the profile is finished loading.

7. Disconnect the USB cable from the device. The RP will power off automatically when disconnected.

8. Power on the RP and wait for it to log in to the system. The initial login may take up to 90 seconds. When an RP is logged in, the RSSI indicator will display on the RP's primary LCD screen.

9. Verify that the RP paired correctly and is displayed on the CU LCD (and in X-Ware if your system is connected to a PC. You may need to refresh the X-Ware display by touching the grid button on the right-hand side.)

> *NOTE:* *If you're using a new or recently serviced CU, or if you are pairing an RP that has never been paired to your system, the RP icon(s) in X-Ware will default to the top left corner of the software Home screen. Position the icon(s) as desired for your configuration. In order to save your custom Home screen, you will need to save your configuration file to a USB drive and reload the file to the master CU after pairings are complete. See the "Saving and Loading a System Configuration File" section below for more information about this process.*

X-Ware Grid Button

10. The RP is ready for use. Repeat steps 4–9 until every RP is paired.

Saving and Loading a Configuration File:

Follow the process below if you need to update the configuration file loaded to your system's master CU. (This may be needed after pairing new RPs, or re-pairing RPs to a new or recently serviced CU.)

1. Start with a system that is already powered on, paired, and connected to X-Ware. Complete any updates to your configuration file from X-Ware before proceeding.

2. Insert a USB drive into the X-System computer.

> *NOTE:* *Make sure the USB drive has enough space on it to save the file. 50 KB should be plenty.*

3. In X-Ware, click the gear icon located at the bottom left of the home screen. This will launch X-Ware's Advanced Settings window.

4. Go to **File** and click **Save System Configuration As…** and save your file to your USB drive. You may also choose to save a copy to the Documents folder on the computer.

> *NOTE:* *The file name must be 8 characters or less! It is helpful to include your school and a date in the name when sending it to CoachComm for assistance. For example, AU_W9_18, TAMU8.30, etc.*

5. Once the file has been saved to your USB drive, you can exit out of the software and eject your USB drive from the computer.

6. Plug the USB drive into the front of the master CU. An **External USB Drive** menu screen will display on the CU LCD.

> *IMPORTANT:* *Only load your configuration file to the master CU. Loading the file to the secondary CU (if you have one) may cause system malfunction.*

7. Use the master CU's navigation buttons to scroll through the list of menu options on the CU's LCD until **Delete System Configuration** is highlighted. Press the enter button and delete the current file that is stored on the CU.


CU Navigation Buttons

External USB Drive Menu
Programming MSP430
Delete System Configuration
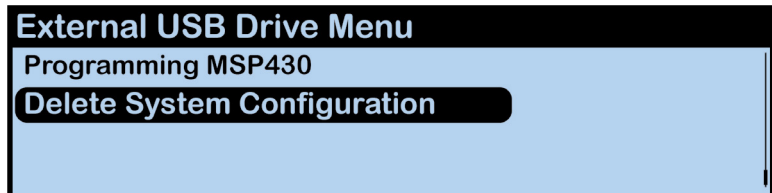
CU LCD: Delete Configuration File Prompt

8. Once the CU is finished deleting the old configuration file, a prompt will instruct you to "Please cycle power to Control Unit and any connected devices." Reboot the CU(s).

9. After power cycling, a warning message will display on both CUs since there is no system configuration file in use.

WARNING!
No CCF found. Unable to configure Control Unit.
OK
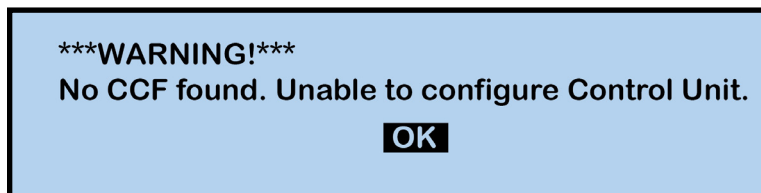
Warning Message - No CCF

10. With the USB drive still inserted into the master CU, the External USB Drive Menu will display. Navigate to the **Upload System Configuration** menu option**.**


External USB Drive Menu
Download Firmware
Upload System Configuration
Download System Configuration
Download System Log File
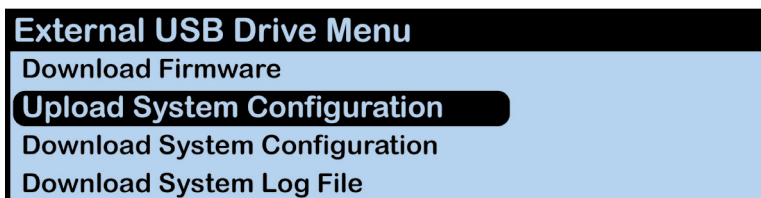
CU LCD Upload Configuration File Prompt

11. Press the master CU's enter button and scroll until you find the configuration file you wish to use, then press enter to select it.

System Configuration File List
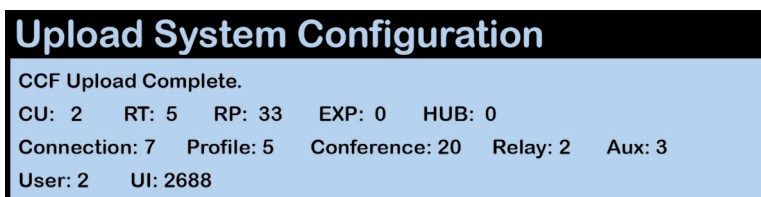WK9_18
WK10_18
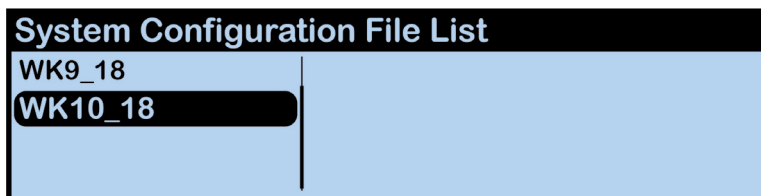
CU LCD: Sample List of Available Configuration Files

12. The master CU screen will display a progress message while the new configuration file loads.

Upload System Configuration
Uploading CCF . . . 20%
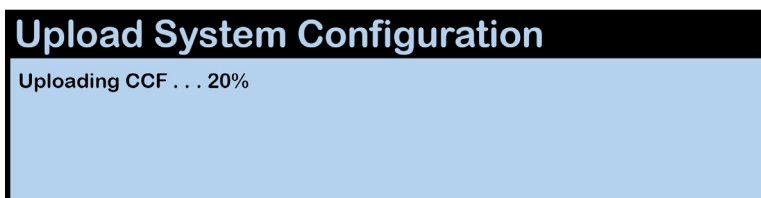
CU LCD: Sample CCF Upload In Progress Screen

13. Once the configuration file has finished loading, the master CU will display the following message: "Upload System Configuration. CCF Upload Complete." along with a configuration file summary. A prompt will instruct you to "Please cycle power to Control Unit and any connected devices." Reboot the CU(s).

Upload System Configuration
CCF Upload Complete.
CU: 2   RT: 5   RP: 33   EXP: 0   HUB: 0
Connection: 7   Profile: 5   Conference: 20   Relay: 2   Aux: 3
User: 2   UI: 2688

CU LCD: Sample CCF Upload Completed Screen

14. Select either **Home** or **Away** when prompted on the master CU. For dual-CU systems, during startup, the configuration file (CCF) will begin loading while the Home/Away prompt is displayed on the top CU. A progress bar shows the load process on the bottom CU. For all systems, once the Home/Away prompt is cleared, the CCF load progress can be seen on the CU(s).

CU Home/Away Prompt and Progress Bar

15. Wait until the CU(s) display the "CCF Loaded" message along with a configuration file summary. (For dual-CU systems, the bottom CU will take about 30 seconds longer than the top.) When the CCF load is complete, the home screen will display on the front of the CU(s) and you can proceed with operation.

CCF Loaded

Version: 3 Flags: 02	Length:	21,232	Number of Devices: 8
Device Connection: 7	Control Unit: 2	Expansion: 0	Hub: 0
Radio Transceiver: 6	Radio Pack: 36	Radio Pack Profile: 36	
Conference: 12	Relay Assignment: 0	Aux Audio Assignment: 0	
User Info Record: 0	Access Rights:	0	UI Data: 0

CCF Loaded Confirmation Screen

16. Continue with normal system operation, including connection to X-Ware if your system is connected to a PC.

If you have any questions after reviewing this document, please consult the additional product documentation available at www.coachcomm.com/x-system or call Customer Support at 1.800.749.2761.