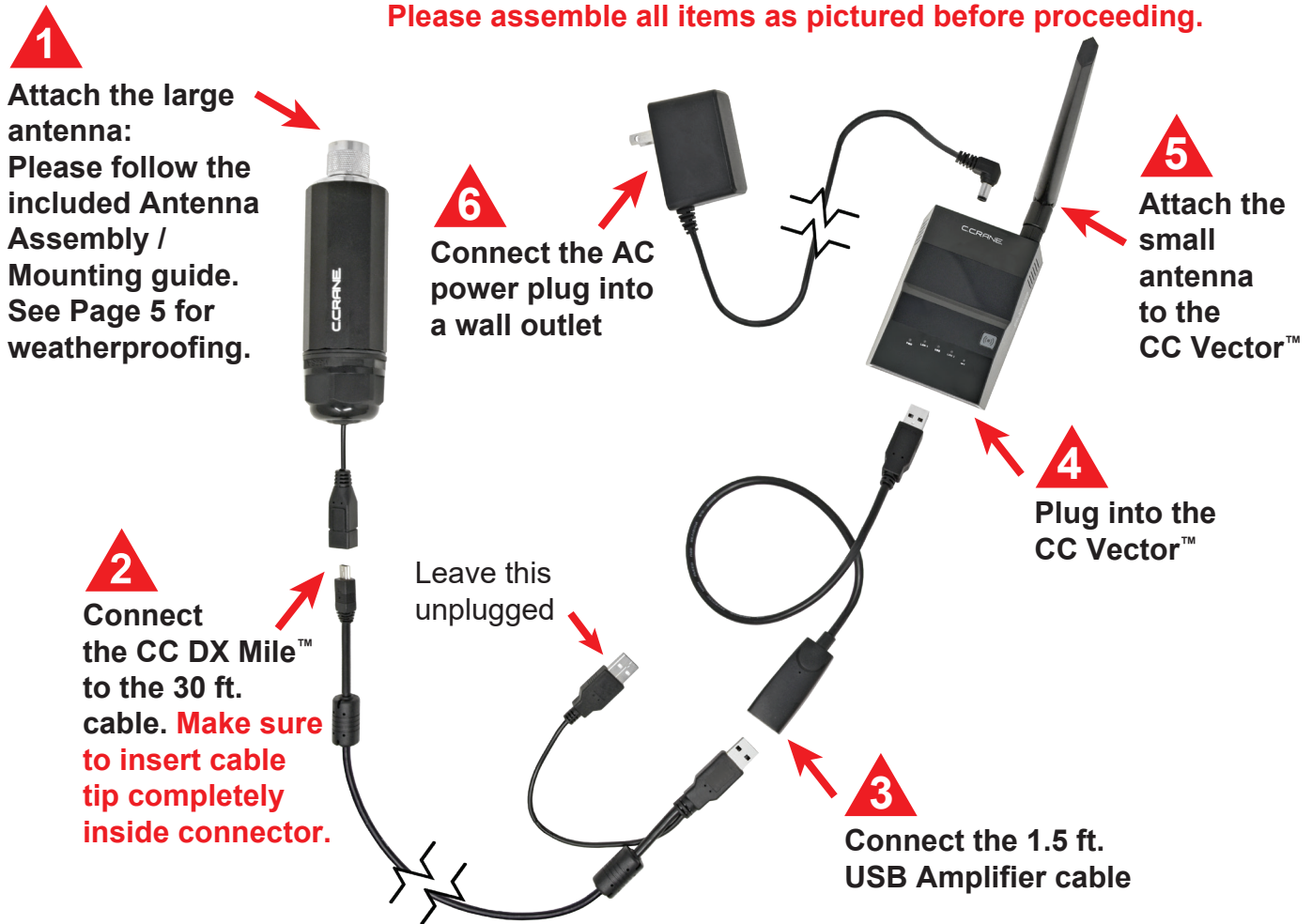


Please assemble all items as pictured before proceeding.



NOTE: Please do not skip any steps. Steps “B1” or “B2” must be done before proceeding.

A1 After plugging in the AC Power cord into the CC Vector Repeater, wait 1 - 2 minutes.

B1 Configure Wirelessly (most popular way):
(Internet browser required).

1. From your computer, tablet, smartphone or WiFi device, go to the WiFi Settings/Connections and connect to the **WiFi Network Name** listed on the sticker underneath the CC Vector.

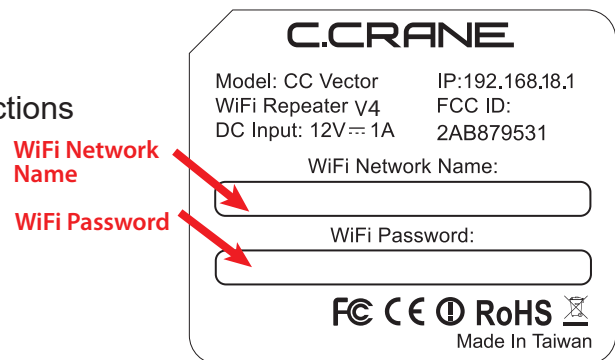
2. Enter the **WiFi Password** when prompted.

OR

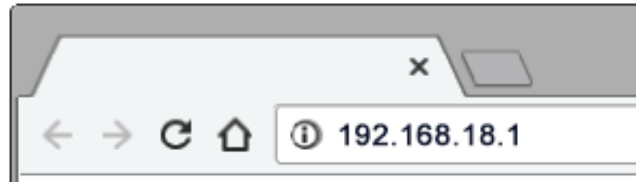
B2 To Configure with an Ethernet Cable:

Although the CC Vector can be set up from a tablet or a smartphone, it may be easier to use a computer using the included 18” Ethernet cable.

Connect the Ethernet cable to your computer’s Ethernet port and to either of the CC Vector’s Ethernet ports on the back of the device.



C After confirming you have completed Step “B”, open the Internet Browser screen on your device and enter **192.168.18.1** into the Address Bar. Press “Enter” on your keyboard.



NOTE: At this point you are connected to the CC Vector but your browser will likely tell you that you are not connected to the internet. This is normal because the CC Vector is not yet setup. Continue with the setup.

D

The screenshot shows the C.CRANE web interface. At the top right, it says "Internet Status NOT CONNECTED" and "Firmware Version v0.15". On the left, there are menu options for "Easy Setup" and "Advanced". The main content area is titled "Pick network to extend" and displays a table of available WiFi networks. A callout bubble on the left says "Click on the WiFi network that you want to repeat..". A callout bubble on the right says "...then click 'Select'".

Network Name (SSID)	Signal	CH	MAC
CCRANE-AB0F17	[Signal Bar]	5	00:C0:CA:AB:0F:17
CCRANE-HQ	[Signal Bar]	6	0C:9D:92:B9:AD:E0
RETURNS	[Signal Bar]	2	48:F8:B3:EF:7B:B4
CCRANE	[Signal Bar]	5	00:C0:CA:A6:F9:3A
CCRANE-ABB416	[Signal Bar]	1	00:C0:CA:AB:B4:16
E2000	[Signal Bar]	1	68:7F:74:22:81:3C
AIRPORT	[Signal Bar]	1	00:C0:CA:96:97:C4
TP-LINK_Smart Plug_9DF8	[Signal Bar]	1	98:DA:C4:E0:9D:F8
sunvoip	[Signal Bar]	11	E6:CB:BC:91:2F:DB

(..be sure that the signal bar is higher than 50% for the best results)

Rescan

NOTE: For best performance, your signal should be higher than 50%. For a better signal, try adjusting the orientation and placement of the USB antenna - then click “Rescan” to see if the signal is higher.


E

The screenshot shows a screen titled "Enter Wireless Password or Phrase for: CCRANE-HQ". Below the title is a form with a lock icon and the text "Enter password here", followed by a blue "Next" button. Three callout bubbles provide instructions: "Click to unlock if you wish to view your Password" (pointing to the lock icon), "Enter Wireless Password for Network in Step 'D'" (pointing to the password input field), and "...then click 'Next'" (pointing to the Next button).

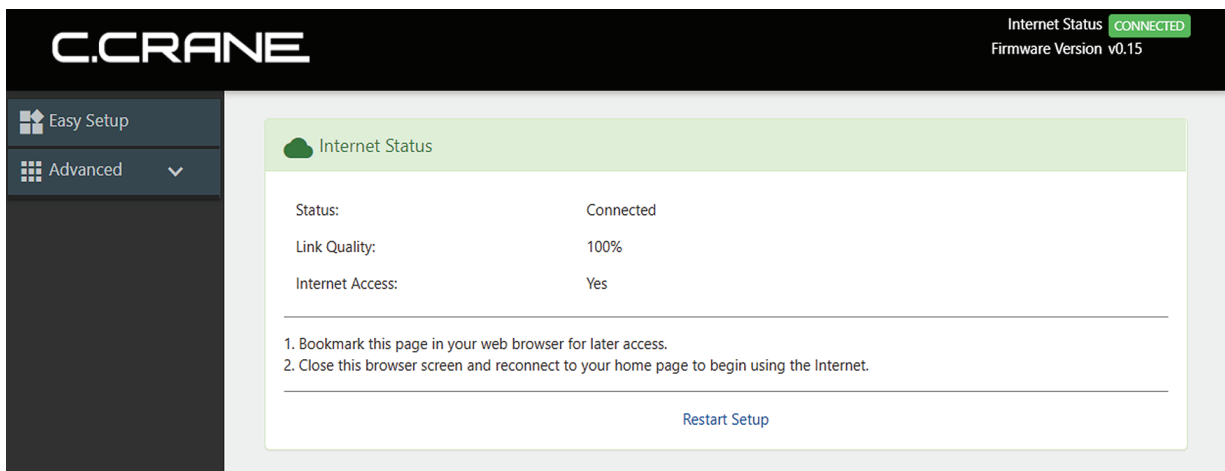
NOTE: If network in Step “D” does not require a password, then you will not get this screen. Proceed to Step “F”.

- F The system will reboot. Please make sure your computer, phone or tablet stays connected to “CCrane” and does not automatically connect to another WiFi network. If no response after 1 minute then close and re-open your web browser screen.

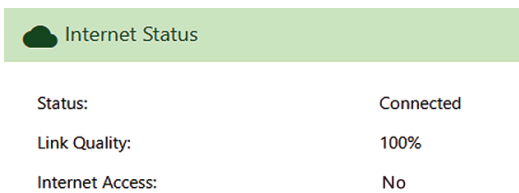
Rebooting, Please wait a moment ...

 NOTE: At this time your computer or mobile device may automatically connect to another nearby WiFi network. Please make sure that it reconnects back to the CCrane-ACC139.

- G You should now see a screen similar to this: (Screens may vary on some devices).



If “Status” is “Connected” and “Internet Access” is “Yes”, then you are finished with the setup. Bookmark this page with your web browser in case you need to return to it to check the connection or change networks. You can now close this screen and continue using the internet normally.



If “Status” is “Connected” and “Internet Access” is “No”, please wait for 5 to 10 minutes. If no change, please see “Troubleshooting and Tips” #2.

Troubleshooting and Tips

1. No “Network Names” are showing under the titles for Step “D” under “Pick network to extend” or it continues to show “Scanning”.
 - a. No WiFi networks in range of the USB WiFi Receiver and antenna. Try moving or re-adjust the USB WiFi Receiver (CC DX Mile) and antenna.
 - b. Check to make sure that the small USB end of the cable is properly inserted fully into the USB WiFi receiver’s (CC DX Mile) connector.
 - c. Make sure to use the main USB connector of the USB cable and that it is inserted into the USB Port of the USB Amplifier Cable. After above is checked, click Rescan. Call C. Crane at (800) 522-8863 if you are still not able to see any “Network Names” in Step “D”.

Troubleshooting and Tips - Continued

2. The “Status” shows “Connected” and “Internet Access” shows “No”

In some cases, if you are at a public WiFi such as an RV Park, Hotel, Hospital, coffee shop, etc. that requires a Username & password, or to accept the User’s Terms and Agreement, open your internet browser and follow their instructions.

3. If your CC Vector WiFi Repeater is not working as it should, dropping connections or not being responsive, you should first do a reset of the repeater to see if the problems persist. Other scenarios where you might want to reset your repeater is if you've forgotten the password or mis-configured it and can't get access anymore.

To reset your CC Vector WiFi Repeater please follow these steps:

- Power up your CC Vector.
- Press and hold the reset button on the bottom of the unit for 15 seconds (Use a paper clip or a non-sharp object).
- Repeat Steps A1 through G.

This process usually works for resetting the CC Vector WiFi Repeater to its factory setting.

4. Error Messages

“WiFi Connection Failed” - Most likely the password entered for the selected Network to repeat is incorrect. Re-enter correct password.

“Connection lost – The Device connection lost” - Your device has lost connection with the CCRANE Network. Most likely your computer, laptop or smartphone re-connected to another nearby network instead of the CCRANE network. Please check your connection to the CCRANE network.

Please visit our website at ccrane.com for additional information or call 800-522-8863.

Additional Tips

- Some devices such as smartphones, tablets, printers, etc. offer WPS as an alternate form of WiFi connection which does not require a password.
- To connect devices to the CC Vector without entering a password, press the “WPS” (Ⓢ) button when prompted by your device to connect. Check the WPS instructions for your computer or WiFi device.



“WPS” (Ⓢ) button

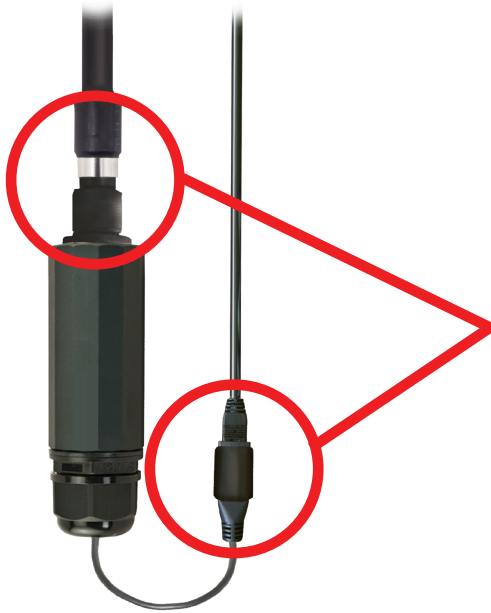
- For best performance we recommend 5 to 15 feet of separation between the CC Vector and the USB Antenna.
- In some cases you may receive faster WiFi by rotating the USB Antenna horizontally, making sure to aim the broad side towards the distant WiFi network.
- It is normal to receive some speed reduction when repeating a WiFi network (because it has to deliver the signal twice).

Weatherproofing

1

Before connecting the CC DX Mile to the antenna, coat the threads of the antenna with the supplied silicone grease.

This will help protect the threads from rust and water incursion.



2

Once the antenna is securely screwed onto the CC DX Mile, use the supplied coaxial seal to completely cover the connection.

We also recommend coating the USB connection with silicone grease and wrapping with the supplied coaxial seal for added protection.

Cold Weather Protection – Below 32° for the CC DX Mile

The CC DX Mile can become intermittent at about 32 degrees F. Here is a simple suggestion to give it another 10 degrees of protection down to about 22 degrees. The CC DX Mile creates a small amount of heat that can be retained by using a 10" long piece of pipe insulation made for 1-1/2" outside diameter pipe. The insulation shown has an "outside diameter" of about 3". Three layers of electric tape can be used to compress and seal the top. It is best to leave the bottom open for drainage.

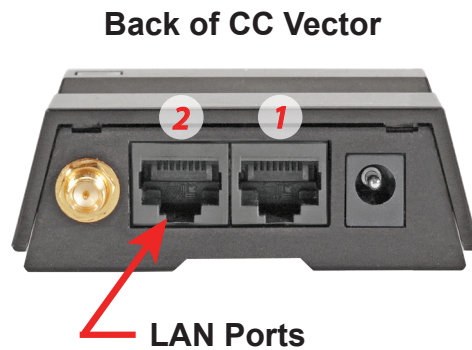
We suggest removing the insulation when the weather has warmed for the season or when it approaches 75° F. The unit can be damaged or its lifetime reduced if operated at high temperatures. For temperatures below 22 degrees F you could add another layer of pipe insulation made for 3 inch pipe. One may be able to find on Amazon by carefully searching: "Pipe Insulation Tubing 3 inch Water Resistant" and selecting the ".75 inch thickness" size. These suggestions are for experimentation at your own risk.



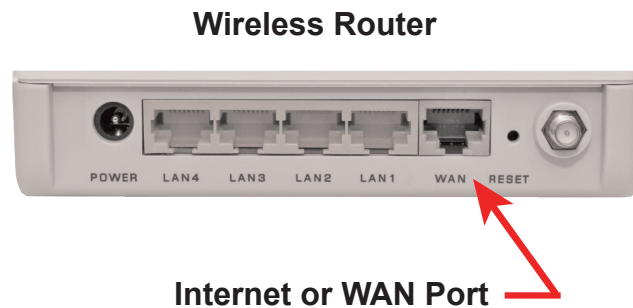
For More Speed connect a WiFi Router - (Not Required)

WiFi speed is variable and depends on distance and other conditions. The CC Vector provides enough speed for browsing the Internet with several devices or streaming video on one device. To improve the WiFi speed on all your devices connect a WiFi router (not included) to the #2 LAN port of the CC Vector.

- 1) Setup the CC Vector normally using the included directions.
- 2) Confirm that the CC Vector is working by browsing the Internet while wirelessly connected to it.
- 3) Connect the included 18" network cable (or use your own longer network cable) to the #2 LAN port of the CC Vector.



- 4) Connect the other end of the network cable to the "Internet" or "WAN" port on the back of your WiFi router.



- 5) Test the setup by wirelessly connecting your computer or other device to the router's WiFi signal and browse the Internet.

Specifications

CC DX Mile Long Range General Specifications

Wireless Standard:	802.11 B, G, N, AC
Frequency Band:	2.4 & 5 GHz
Chipset Gain:	23 dBm
Data Rate @ 802.11b:	11 Mbps
Data Rate @ 802.11g:	54 Mbps
Data Rate @ 802.11n:	150 Mbps
Data Rate @ 802.11ac:	433 Mbps
Certifications:	FCC, ROHS
Operating Temperature:	32° F - 122° F (see weatherproofing on page 5)
Storage Temperature:	14° F - 149° F

CC Vector WiFi Repeater General Specifications

Standards	Wired: IEEE 802.3/802.3u Wireless: 802.11b, 802.11g, 802.11n
Interface	WAN: 10/100BASE-TX Port * 1 LAN: 10/100BASE-TX Port * 1 USB 2.0 Port * 1
Security	WEP Encryption WPA/WPA2-PSK (Pre-Shared Key) WPA/WPA2 AES WiFi Protected Setup (WPS)
Power	Input: 100-240V ~50/60hZ @ 0.35A Output: 12V, 1A
Frequency	2412~2462MHz (FCC) 2412~2472MHz (ETSI) 2412~2484MHz (Japan)
Warranty:	1-Year Limited

Please read these IMPORTANT SAFETY WARNINGS before use.
It is important to read and understand all instructions.



Before Use



Lightning

You may need to ground your antenna if you live in an area prone to lightning.

Power Lines

Never mount an antenna near power lines. If a power line falls and comes into contact with your antenna, DO NOT TRY TO REMOVE IT. Call your local power company.

Wind

Installing an antenna on windy days can be dangerous. Slight winds can create strong forces against the antenna equipment. If you have any doubts about your ability to install the antenna safely, please hire a licensed, bonded professional to do the work. C. Crane is not responsible or liable for damage or injury resulting from antenna installations.

1. Read and understand all safety and operating instructions prior to installing the antenna. Retain Instructions: The safety and operating instructions should be retained for future reference.
2. Water and Moisture: Coaxial sealant around openings and connections of device and antenna will prevent damage when used outdoors. Use device in a vertical position.
3. Never use a utility pole to mount the device and antenna or to use as a support. Never climb a utility pole.
4. Antenna installations can be dangerous because many times it involves the use of a ladder and a possible fall. Do Not install antenna on a wet, snowy or windy day or if a thunderstorm is approaching especially when on top of a building or ladder.
5. The antenna can be struck by lightning, which can be fatal. We recommend a licensed and insured installation by a qualified person.
6. In the event of storms, disconnect the antenna from your device. This will prevent damage caused by lightning.
7. The installation or dismantling of any antenna near power lines is dangerous. Each year hundreds of people are killed or injured while attempting to install or dismantle an antenna.

Tips to protect your house and contents from lightning:
http://www.lightningsafety.com/nlsi_lhm/IEEE_Guide.pdf

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