

Installing your CR Box and CR Map App Connection

Alright, let's get your CR Box set up. There are two main steps to get you connected:

- 1. Physically installing the CR Box on your boat.
- 2. Syncing it up with your CR Map app on your phone.

You've got two ways to connect your CR Box, depending on your boat's setup. If you can plug directly into your Starlink router, that's the easiest most efficient way to go.

Wired Connection

You'll connect directly into your Starlink router using the Ethernet cable we've included.

Wi-Fi Connection

If a direct wired connection isn't an option, you'll connect via your boat's Starlink Wi-Fi network.

Choose the connection method that is right for you, and follow those specific instructions, linked above.

Before You Start

Here are a few important things to know and have ready before you begin the installation:

- Install the CR Map App. Get the CR Map app from your phones app store. You can search for "Canyon Runner" or "CR Map" (sometimes it might show up CR Inshore).
- Know your Canyon Runner login. Have your Canyon Runner username and password ready. This is the same login you use to view our map on the web, and you'll need it for the app.
- Locate your NMEA 2000 network location. The CR Box needs power, and it gets it from your boat's NMEA 2000 network, connected to your chart plotter. Make sure this network is:
 - **Powered:** It needs 12V at 4A or less and in most cases is only powered up when electronics are on.
 - **Terminated:** The ends of the network should be properly terminated.
 - Available: You'll need an open female socket to connect the CR Box.
 - *Note:* Your CR Box package includes an extra T-connector if you need to add a socket to your network.



Getting To Know Your NMEA 2000 Network



Figure 1. Typical NMEA 2000 "backbone" installation

The red circle highlights a typical NMEA 2000 "backbone", which is the main cable system connecting your boat's electronics. Notice the 'T'-shaped connectors where different devices plug in. You'll need to find an open one or add the extra T-connector that came with your CR Box to connect it here.



Wired Connection: Connect Direct to your Starlink Router

* Recommended Installation *

Connecting your CR Box directly your Starlink's router with an ethernet cable

Step 1: Installing the CR Box

- Plug in the CR Box to your NMEA Network. Find an open port on your NMEA 2000 network. If you don't have one, use the extra T-connector that came with your CR Box. Plug the other end of the NMEA cable into the port on the CR Box marked "NMEA (Power)".
- Check for Power. Once you turn on all your boat's electronics, you should see a red indicator light on the CR Box. If you don't see that red light, double-check that all your electronics are fully powered on and that all NEMA connections are tight. Leave all your electronics on the entire time you are doing this.
- **Plug in the Ethernet Cable.** Take the Ethernet cable (the yellowfin cord in the pictures of the CR Box below).
 - Plug one end into an Ethernet port on the CR Box.
 - Then, plug the other end of the cable into an open Ethernet port on your Starlink router.
 - Note for older Starlink routers: If you have a Gen 2 or earlier Starlink router, you'll need an adapter. One should have been provided in the package you received with your CR Box.



Figure 2. & 3.

Red indicator light shows that the box is getting power form the NMEA 2000 network once you turn on all your electronics – if you don't' see a red light make sure ALL your electronics are on.



Step 2: Connecting your CR Box to CR Map app

- **Confirm Starlink has internet access.** Power up your Starlink and confirm that it has internet access. You can quickly check this on your cell phone's Wi-Fi settings to confirm the Starlink Wi-Fi is on the internet.
- Open up your Starlink App. Make Sure Your Starlink is on and has internet service. You should see the Canyonrunner box as another "Device" on your Starlink Wifi "Network" –
 If so you are done!!!



Step 3: Confirming You Can See Your Boat on the CR Map app

- Sign into the CR Map App. Open the app on your phone and log in with your Canyon Runner username and password.
- You should see your boat's name in the top left corner of the app. If you do not see your boat's name at the top of the screen as shown Error! Reference source not found. in figure 4. Don't go any further! Text or call Adam or Deane, and we will set it up so you can



continue.

- It May or May Not it says "Live" underneath your boat's name THIS IS NOT CRITICAL IF HOOKING UP THE BOX WITH THE ETHERNET CABLE, as long as the Canyonrunner box appears as a device on the Starlink Network you're all set! You can put these instructions away – you're connected. Your boat might take 10-15 minutes before it shows up on the map.
- Text Adam or Deane and We Can Check the Backend of the APP and see if you are Live Immediately instead of waiting the 15 minutes for it to show on the Map.



Troubleshooting Tips

If you're having trouble getting connected, check these potential problems. They aren't in any particular order, so just go through them as needed.

- Check your NMEA 2000 connections make 'em snug!
 - This is the most common reason for a connection failure. After you connect the CR Box, double-check that all your other NMEA 2000 connections are very tight and stay snug.
- Keep your boat's electronics powered on.
 - It's important that your boat's electronics, especially your Wi-Fi (like Starlink) and the NMEA 2000 network that powers the CR Box, remain on for the box to feed information to the CR Map.
 - If you do power down your NMEA devices and Wi-Fi, make sure your usual "Vessel Departure Protocol" includes turning on all electronics *before* you leave the dock. Your boat should show as "LIVE" in the CR Map app as long as your Starlink has internet access.
- Verify your NMEA 2000 network is healthy. Make sure your NMEA 2000 network is in good working order.
 - NMEA networks should be balanced, meaning the power supply is located near the center of the network with an equal number of devices on either side of it.
 - Any unused NMEA connectors should be terminated, as shown on page 2 of these instructions in Figure 1.

Wi-Fi Connection

Connecting your CR Box if you can not directly connect the CR Box to your Starlink Router with an ethernet cable

Step 1: Installing the CR Box

- Plug in the CR Box to your NMEA Network. Find an open port on your NMEA 2000 network. If you don't have one, use the extra T-connector that came with your CR Box. Plug the other end of the NMEA cable into the port on the CR Box marked "NMEA (Power)".
- Check for Power. Once you turn on all your boat's electronics, you should see a red indicator light on the CR Box. If you don't see that red light, double-check that all your electronics are fully powered on.



Red indicator light shows that the box is getting power form the NMEA 2000 network once you turn on all your electronics – if you don't' see a red light make sure ALL your electronics are on.

Step 2: Connecting your CR Box to CR Map app

This part involves connecting your phone to your CR Box, and then connecting your CR Box to your boat's Starlink Wi-Fi Network. It has a few more steps, but follow this step by step and go slow and you'll get connected – biggest mistake and rushing through this.

- Sign into the CR Map App. Open the app on your phone and log in with your Canyon Runner username and password.
- Check for Your Boat's Name (STOP Point). You should see your boat's name at the top of the screen (see Figure 4 below).



 If you do not see your boat's name at the top of the screen your CR Box has not yet been completely configured. <u>Don't go any further!</u> Text or call Adam or Deane, and we will set it up so you can continue.



Figure 4. CR Map app showing boat name "Ditch Digger Testing"

- **Press 'Reconnect' in the App.** Once you *can* see your boat's name (like in Figure 4), press the "Reconnect" button. This will bring up some instructions that you'll need in a moment.
- Power Up Boat Electronics. Make sure all the electronics on your boat are turned on. Remember your NMEA network, especially, needs to be receiving at least 1A at 12V from the boat to power the CR Box and all connections are tight – you'll see the red light on the box – if you do not see that red light you aren't getting power and need to troubleshoot your NEMA network connections.
- Connect Your Phone to the CR Box's Wi-Fi (VC-canyonrunner).
 - Keep the Canyon Runner App open on your phone (don't swipe it away/closed).
 - Now, go to your phone's Wi-Fi settings screen.
 - Within a minute or two (it might take 5-10 minutes, so be patient), you should see a new Wi-Fi network appear named VC -canyonrunner.
 - Forget any Wi-Fi networks that your phone is currently hooked up to first this is critical – forget all of them – sometimes you forget one and phone automatically connects to another – make sure your phone isn't connected to any before proceeding.
 - Connect to this VC -canyonrunner network. The password is: canyonrunner.
 - **Confirm the connection:** A solid blue checkmark should stay next to the network name for 15-20 seconds to confirm your phone is connected.



Good to know: This network will have weak security and no internet access.
 That's normal – you're only on it for a few seconds to connect your CR Box to your boat's Starlink, then you won't use it again.

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Figure 5. An iPhone connected to the VCcanyonrunner network. The blue checkmark indicates that is has successfully connected.

- Confirm Connection in the CR Map App.
 - Return to the CR Map app on the same phone. The instructions screen should now say "Are you connected to the correct Wi-Fi network".
 - Click the checkbox to confirm, and then press 'Next'

How to Connect to your CR Box
1. Plug in your CR Box if you haven't already.
2. Leave this app and navigate to your mobile device's Wi-Fi settings. Find the Wi- Fi network that includes: "canyonrunner". The password is canyonrunner
Copy password
3. Are you connected to the correct Wi-Fi network?
4. Return to this screen and tap "Next".
Next

Figure 6. CR Map app setup instruction page. Once you have successfully connected to the correct Wi-Fi network, click the checkbox and the screen will allow you to press the Next button.



- Connect Your CR Box to Your Boat's Starlink Wi-Fi.
 - The app will now ask you to select your boat's Starlink Wi-Fi network.
 - **Type in your boat's Starlink Wi-Fi password**. (*IMPORTANT* This is the password you give guests on your boat who want to link their phones to your Starlink NOT the password for your Starlink admin account where you pay bills etc.) This step allows your CR Box to connect to us using your boat's Starlink Wi-Fi.

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Figure 1. Example Wi-Fi connection screen. You will need to type in the password for your Starlink boat wi-fi network to allow the CR Box to connect.

- Monitor Connection in the App.
 - Once you enter the password, the app screen will show a rotating circle as it connects.
 - THIS COULD TAKE AS LONG AS 3-5 MINUTES OR AS SHORT AS A FEW SECONDS BE PATIENT AND DO NOT DO ANYTHING BUT WAIT.
 - Once it connects to the Starlink Wi-Fi It will then flip back to the home screen in the CR Map app.
- Verify "Live" Status in the App.
 - **Once you see "Live" underneath your boat's name you're online**. (figure 6 below for reference).
 - Once your CR Box is successfully linked to your Starlink (with that 'Live' status), immediately delete the "VC-canyonrunner" Wi-Fi network from your phone's list of known Wi-Fi networks.
 - Now you're all set! You can put these instructions away you're connected. It might take 5-15 minutes for the boat to show up on the CR Map but if it says "Live" you are good to go.
 - If you don't immediately see your boat as "Live" in the upper left corner, close the CR Map app completely (swipe it away from your open apps) and then open it back up. You should now see your boat as "Live".
 - If your boat still doesn't show as "Live", please review the Troubleshooting Steps at the end of this document.





Figure 2. A successful CR Box installation showing your boat as Live.

Important Note: Even when it says "Live" in the app, it could take up to 5-15 minutes for your boat to appear as an icon on the Canyon Runner Map itself. Once it appears, you should see regular updates of your position.

Troubleshooting Tips

If you're having trouble getting connected, check these potential problems. They aren't in any particular order, so just go through them as needed.

- Check your NMEA 2000 connections make 'em snug!
 - This is the most common reason for a connection failure. After you connect the CR Box, double-check that all your other NMEA 2000 connections are very tight and stay snug.
- Keep your boat's electronics powered on.
 - It's important that your boat's electronics, especially your Wi-Fi (like Starlink) and the NMEA 2000 network that powers the CR Box, remain on for the box to feed information to the CR Map.
 - If you do power down your NMEA devices and Wi-Fi, make sure your usual "Vessel Departure Protocol" includes turning on all electronics *before* you leave the dock. Your boat should show as "LIVE" in the CR Map app as long as your Starlink has internet access.
- Verify your NMEA 2000 network is healthy. Make sure your NMEA 2000 network is in good working order.
 - NMEA networks should be balanced, meaning the power supply is located near the center of the network with an equal number of devices on either side of it.
 - Any unused NMEA connectors should be terminated, as shown on page 2 of these instructions in Figure 1.
- Understand the Two Wi-Fi Networks Needed. Because two different Wi-Fi networks are needed to set up the CR Box, this part can sometimes get confusing. Make sure you remember this sequence:



- **FIRST:** Your phone needs to be connected to the Internet (via cellular or your boat's Wi-Fi like Starlink) when you first sign into the CR Map app.
- **THEN:** You connect your phone to the vc- canyonrunner Wi-Fi so it can configure the CR Box.
- Keep your phone connected to the CR Box's wi-fi. Sometimes phones don't like to stay connected to wi-fi networks that don't have internet access (like vc-canyonrunner).
 - When connecting your phone to the vc-canyonrunner wi-fi and confirming it in the app, it's really important that your phone stays connected to that vc-canyonrunner network.
- Not Reconnecting After Powering Off Your Boat the biggest issue we see is with folks that power off their NEMA Network (Electronics) and their Starlink every time they leave their boat and go home. The box should automatically reconnect to the Starlink once powered up but there are times where it doesn't.
 - The NUMBER 1 reason it doesn't automatically connect to the Starlink Wi-Fi is because the box reconnects to your phone first – as your phone remembers the boxes VC-canyonrunner Wi-Fi password. SO IT IS CRITICALLY IMPORTANT THAT AFTER YOU SUCCESSFULLY LINK YOUR BOX TO YOUR STARLINK YOU DELETE THE VC-CANYONRUNNER WIFI NETWORK FROM YOUR PHONES LIST OF KNOW WIFI NETWORKS.