Instructions for operation of RadioLabs USB WiJacker v2 repeater.

1. Plug a RadioLabs USB antenna into the WiJacker v2 repeater.
2. Apply proper 12v power to the repeater using only the supplied adapter. (Yes, our usb repeater can be run from 12v DC, but more on that later)
3. When the USB repeater fully boots, you will see a new WiFi signal name being broadcast that says "WiFi USB/4G Modem Router". Connect to this signal where you connect to WiFi on your laptop, phone or tablet.
4. When connected, your laptop or phone should automatically open up a browser window or config screen for first time setup.
5. Important: If a screen doesn't automatically pop up the first time, open up an internet browser window (ie: Google Chrome, Safari, Internet Explorer, Microsoft Edge, etc) and in the address bar, type in "192.168.36.1"
6. On first time setup, it asks you to "SETUP A PASSWORD TO ACCESS IN THE FUTURE". By default there is no password, you are making one up for first time use. It needs to be 8 digits or more. Write this password down and store it for future use. RadioLabs cannot assist if you lose this password and we have no way of unlocking the repeater except having you reset the repeater to factory default and set it up again. (More ok resetting the repeater later)
7. Once you log in the first time, you will be at the main status and selection page. From here, simply hit the "Easy Setup" tab to ensure you're on the right page.
8. Connecting to a WiFi signal: You will then select the 2nd picture option down, that says "WiFi Hotspot Extender", at which point our repeater will automatically scan for all surrounding WiFi signals that our USB antenna (WaveXL, WaveRV or CaptiFi can receive)
9. From the menu, select the name of the signal you want to connect to. Our antennas are very sensitive, so they can receive a substantial amount of signals. The list can be multiple pages long if you're in a rural area. Once you find the correct signal name, select it, then confirm by hitting the "Select" button below the signal name.
10. If the WiFi signal is encrypted, enter the WiFi password for that network. WiFi passwords are case sensitive. RadioLabs WiJacker v2 usb repeater will automatically select all the proper encryption type, so do not change that information. Only enter the password for that network.
11. Customizing your repeater: Next, scroll down to "Hotspot Configuration" area, where you can customize the signal name, so it no longer broadcasts the default name. This is called the "SSID" or "Hotspot Name" and you can change the name to anything you want. Simply erase the "WiFi USB/4G....." name, then carefully type in the name you want broadcast inside of your RV or boat.
12. Next, enter a WiFi password you want for your own personal network. Make sure it's correct and write this new password down. Finally, hit the "Finish" button and wait 30-45 seconds until the repeater reboots with all the new settings complete. You will not have to do steps 11 or 12 in the future, as the WiJacker v2 will store this information until you wish to change it in the future or if you reset the repeater to factory defaults.

13. IMPORTANT: Once you have reconfigured the USB repeater and it reboots, the default signal name will disappear and the new name and password you applied will appear in your phone or laptop's WiFi signal utility on your device. The name will appear in the list. You must connect back to the new name of the repeater and enter the WiFi password you assigned, to gain access to your newly configured hotspot. This step is important, because your USB repeater will now have Internet if done correctly.

14. Once you leave the RV park or marina you had internet at, the RadioLabs antenna and USB repeater will lose signal. The usb repeater will once again automatically display the pop-up window next time you go to use it. It will sense it lost connection and will again display the automatic pop-up splash page so you can reconnect to another WiFi hotspot next time you need internet. If it does not show this splash page, again, simply open a browser window and enter the configuration IP address discussed above. The IP address 192.168.36.1 must be entered into the browser if the setup screen doesn't pop up automatically. Some computers and devices have pop-up blockers, disabling our automatic setup screen and requires you enter the device's IP address to gain access.

Resetting: Sometimes, configuration errors occur, or customers forget their WiFi or login passwords. If this ever happens, RadioLabs has a reset button on the back (bottom) of the USB Repeater. Simply grab a small object like a toothpick or a paper clip, and gently press and hold the reset button for 15-30 seconds, or until the lights on top of the usb repeater all turn on, or change. You will see a variant of this occur so be patient and allow the lights to all come on. Once you see a change in the lights, release pressure on the soft-touch reset and the USB repeater will go back to factory default settings. You can then proceed with the instructions at step 1 of these instructions.

Troubleshooting:

1. Problem: When connecting to the USB repeater's default signal, a pop-up screen doesn't automatically come up as described. Solution: Simply open up a browser window and enter the IP address for the device, "192.168.36.1 into the ADDRESS BAR of the browser. Not a search box.

2. Problem: Slow Download or internet speeds. Solution: Due to the large amount of WiFi signals and high performance receiver and transmitter that RadioLabs WiFi antennas achieve, sometimes there are multiple signals displayed simultaneously. Our antennas can pick up signals from many miles away. Due to the fact there's only 11 WiFi channels broadcast in the WiFi band, these channels are overlapping and sometimes there may be 10 or more signals on one channel. Sometimes the signal you're trying to connect to, is very far away, and there are other WiFi routers or access points on the same channel, with stronger signal strength received by our antenna. RadioLabs cannot do anything specifically about this issue, as the WiFi band is in use by everyone, not just that specific RV park or Marine or public hotspot you're trying to connect to. If the access point you're trying to connect to is your own, simply observe the channel it is on, then modify your own router or WiFi signal to a different channel, so this interference is eliminated. The WiFi channels can and will overlap each other, by 2-3 channels. It is best if multiple access points are available, select the one that is on the cleanest channel, with little to no interfering WiFi hotspots to either side. Example. If you're in an RV park and you have

their signals on channel 1, 6 and 11. The strongest signal also has 4 other hotspots or other WiFi signals shown or displayed on the same channel, it may be best in some cases to connect to a weaker received signal that has a lower signal strength, but has no interference on the same channel. We cannot do anything about this however and it's simply the law of physics, making the signal slower due to major interference on the 2.4ghz band. WiFi is very popular and the number of routers and WiFi hotspots you will find can be overwhelming. Over time, you will find tricks and other things you can try to get the best speed and best performance out of your WiFi system.

3. Problem: Cannot find a specific Access Point during a WiFi s am. Solution: Check to make sure the antenna is plugged in. Make sure the antenna is mounted perfectly vertical. Our antennas need to be mounted straight up and down, in free space, with no other object against the antenna. Do not mount the WiFi antenna against, or near another antenna, metal pipe or pole, or even wood. Any object will obstruct and radically alter the radiation pattern of the antenna. It is a high performance device and requires you have it mounted properly to perform properly. It is imperative that you install our antennas properly. All range problems we have ever encountered, we have requested photos of how the antenna is mounted. In every case, the antenna was merely sitting on the ground, leaning against the side of the customer's RV or boat, at a 20-30 degree angle. No, our antennas are not designed to mount like that and you would never use the antenna in such a situation. They are designed to go on top of our antenna mount, as vertical as possible, with no instructions against the antenna. In some cases, the customers have sent photos of the antenna strapped to the side of an aluminum Sailboat mast using large zip ties. No, don't do that. The radiation pattern of our antennas is instantly destroyed, because the radiation is instantly absorbed into the aluminum mast, the signal pattern is destroyed and the antenna's performance degrades immediately. No antenna can or will work in that situation, because they are not designed to do this. You're better off to mount our antennas much lower on the deck of your sailboat, where the antenna is in free space, keeping the radiation pattern and our USB module functioning properly. We have circuitry inside of our antennas specifically designed to cut the signal strength and power to the antenna if not installed properly, to prevent damage to our antenna circuitry.

4. If you cannot find a signal from your home router or a signal nearby, that you can pick up on another device, that signal may be 5Ghz. RadioLabs antennas achieve greater performance than our competition because we focus our range and high gain only on the 2.4ghz public WiFi band. No RV park or marina uses the 5Ghz band for WiFi. In the very rare situation where there are 5Ghz signals available, they ALWAYS have a 2.4 GHz signal available as well. Simply choose the proper 2.4 GHz signal broadcast. We have developed a dual band antenna as well, but the performance of all dual band WiFi antennas is dismal at best. We have not and likely will not develop a dual band travel antenna, because they simply aren't needed, there's almost no request, and in the rare instances where WiFi is being broadcast on the 5Ghz band, it cannot transmit far and is not used by that specific RV park or marina for public WiFi connection, but is used by the RV park or marina as a tool to get that signal from one tower to the next, and is not used to provide public access. We do have options for long range WiFi on the 5Ghz band as well, but to achieve performance over 4db gain, RadioLabs solely focuses on the 2.4 band. One of our competitors WiFi antenna systems utilizes the 5Ghz band and boasts about this feature. We have tested their system and all others with dual band capability

and found in laboratory and real world testing, that even RadioLabs smallest WiFi antenna (CaptiFi) outperforms their antenna system, with 12 times the range, power and receiver performance. Nothing on the market can or will ever achieve greater range than RadioLabs antenna products. This is a claim we know we can make, as we have the highest power output limits and the highest performing receiver you can possibly create, while still being legal to sell. We always strive to do what is considered impossible with all of our antennas. If you cannot receive the signal with our antenna, you will not get the signal with anything else on the market, except possibly one of RadioLabs point to point bridge systems.

RadioLabs antennas are the highest performing antennas and travel WiFi system on the market, hands down. We were the first company in the industry, to develop a WiFi antenna specifically for RV and marine applications and continue to outperform our competition on range and technology by far. If you cannot receive your signal with our antenna, no other system on the market will be capable of receiving that signal either. Hands down, RadioLabs WiFi antenna systems achieve greater range, speed, reliability and user friendly interface than all of our competition. We have continued to refine our high performance WiFi antennas and continue to achieve greater signal throughput than anything else developed. We take great pride in our antenna systems and continue to get awesome feedback from our customers.

RadioLabs antennas are used by more government agencies, corporations and even the space industry. Ever see the SpaceX rocket land on the barge platform out in the ocean? You're looking at live video and telemetry data transmitting through our antennas. Yes, SpaceX uses RadioLabs antennas, the same antennas we sell to our customers, to transmit live video and data to and from another vessel, at a minimum of 5 miles, and generally 7-8 miles or more. Nothing else in the industry, reaches this level of pure raw WiFi performance. We not only provide them as well as NASA with this specific application, but we do so much more for them, but nothing we can brag about or discuss in the open.