Radiolabs Bridge in a Box Setup

This manual will guide you through creating a point-to-point bridge using your Radiolabs equipment.

**Step 1: Preparing for setup.**

To set the bridge up, start by unboxing all of your equipment. In the box there are two radios, two power supplies, two antennas, and all the associated cables. It is important to not mix these two up as you are working on them, so it is recommended that you place a sticky note on one that says “Primary” and on the other that says “Remote”. This guide will refer to the radios by these terms from here on out. *Bridge the units before deploying them!!!*

Plug in both power supplies, and connect each radio to the POE port of each power supply. Then, connect a third Ethernet cable from your computer to the Primary unit’s LAN port. No other cables need to be connected at this time.

**Step 2: Change your computer’s TCP/IP V4 address**

If you are running Windows, click the Start Menu. Then click Control Panel. Then click Network and Sharing Center.
Click **Change adapter settings**.

Right click on **Local Area Connection**, then click **Properties**
Click Internet Protocol Version 4 (TCP/IPv4), then click Properties.

Then:

Click Use the following IP address and match the info as seen here. Then click OK.
Step 3: Configure Primary radio

Open up a web browser (Google Chrome or Mozilla Firefox recommended), and navigate to **192.168.2.1**

Log in information

**User Name**: admin  
**Password**: admin

Click **Advanced**, and then click **Basic**

Click **Set Country Code**

Select your country of residence, and click Apply.
Set the **Wireless Mode** to **WDS Access Point**

**Frequency (Channel)** is set to 6 by default. If you are in an area with a significant amount of wireless activity, we recommend using **Channel 3** or **Channel 9**.

**Network Name (SSID)** is the name of the wireless link created by the two radios. Other WiFi devices will be able to see this. You may name it whatever you wish.

Encryption is recommended to keep devices from connecting to your link. The best type of security is **WPA2-PSK**.

Under the **Pre-Shared Key** field, type a password of your choosing, **eight characters or longer**.

When you’re done, click **Apply**
Step 4: Configuring Remote radio

Now, disconnect the Ethernet cable from the Primary power supply, and connect it to the LAN port of the Secondary power supply. Open a new web browser window, and navigate to 192.168.2.1

![Login page](image)

Log in information

User Name: admin
Password: admin

First, we need to change the country code to your respective country of residence, which can be done under Advanced-Wireless-Basic Settings. Then...

![Advanced settings](image)

Click Advanced, then click Operation Mode.

Choose Client Bridge, then click Apply.

Click Advanced, then click LAN under Network Settings
After the system reboots go back to your web browser and type in 192.168.2.2. Select the advance tab and go to profile settings.

Click Advanced, then click Profile Settings.

Change the IP Address to 192.168.2.2. Then click Apply.
Select the network being broadcast by the **Primary** radio (it was 2.4G by default), then click **Select**.
If you decided to use encryption when setting up Primary, then you will need to enter that password under Passphrase.

Then, check the box that says WDS Client.

Then, click Add.

![Image of Profile Setup]

Click Activate/Save

**Step 5: Verify bridge link**

Now both ends of the bridge should be properly configured. To test, navigate to 192.168.2.2, and verify the firmware page comes up. Now, without switching any cables, navigate to 192.168.2.1. If that firmware page also comes up, everything is configured correctly. If not, then check to make sure all above steps were followed properly. Lastly, proceed to Advanced-Management-Configuration and export the settings of each unit so that you have a digital back-up of your settings.
**Step 6: Revert IP Address**

Following the steps on Page 1 of this guide, navigate back into Network and Sharing Center.

Click on Change Adapter Settings.

Right-click on Local Area Connection, then click Properties.

Click Internet Protocol Version 4 (TCP/IPv4), then click Properties.

![Internet Protocol Version 4 (TCP/IPv4) Properties](image)

Click the button that says Obtain an IP address Automatically

And

Obtain DNS server address automatically.

Then, click OK.

**Step 7: Deploy the bridge**

Now the bridge is configured, so you need to deploy it. Plug the Primary radio into an open LAN port on your router (this is the side connected to the Internet). Mount the antenna, and connect it to the radio. At the remote location, connect the Secondary radio to its power source and to the antenna and mount the second antenna, pointing it at the first. You can tell when they are aligned properly when the four signal indicator LEDs light up.

You should not have full internet connectivity through the Secondary radio’s Power over Ethernet LAN port. You can plug an Ethernet cable from this port into a wired device for direct internet connectivity, or plug it into the LAN port of a router. If you plug this into a router, it is recommended you disable the DHCP function of that router to maximize network connectivity.