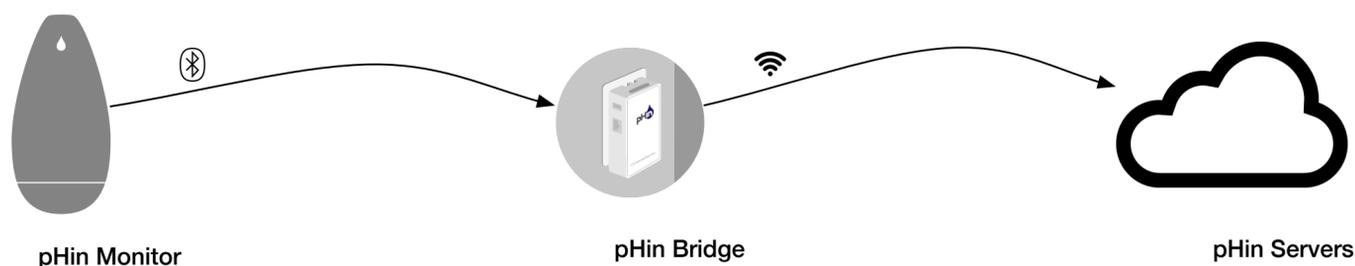


Using the pHin Bridge

The bridge relays pHin Monitor samples to the pHin Cloud over your home WiFi. To do this, the bridge must be plugged into power and connected to your WiFi with your WiFi password.



Troubleshooting your Bridge

If your home WiFi changes, you will need to share the new sign-in information with your bridge. WiFi changes that affect your Bridge include: installing a new wireless router, changing the password for your WiFi, or changing the name of your home's WiFi network.

Updating this WiFi setup requires two steps

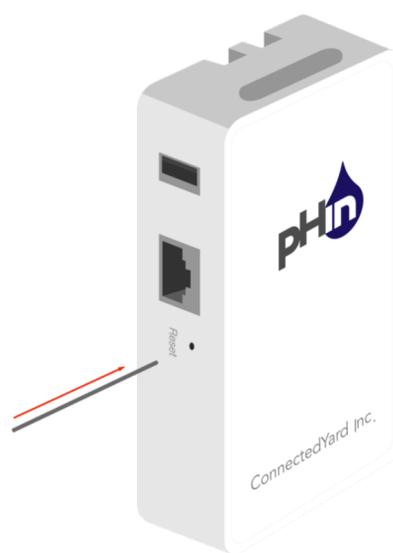
1. Pin Reset your bridge.
2. Use the pHin Mobile App to connect the bridge to your new WiFi Setup.

Pin Resetting your Bridge

Pin resetting your bridge will return your bridge to its factory-fresh condition so that you can set it up to your WiFi Network.

You will need a paperclip, pin, or other small stiff wire. You will also need to be able to access the small Reset Hole on the left side of the pHin while it is plugged in. This might require temporarily relocating the bridge to a more convenient outlet.

1. Ensure that the bridge is plugged into an outlet such that you can access the Reset Hole on the left side of the Bridge.
2. If you have just moved the Bridge, ensure that it has been plugged in for at least 10 seconds.
3. Carefully insert the paper clip into the Reset Hole on the left side of your Bridge. You should feel a small spring-loaded button depress.
4. Hold the button down for a count of 15 seconds.
5. If you feel the paper clip slip off of the button, you will need to repeat steps 3 and 4.
6. Remove the pin. Over the next 30 seconds the Bridge should restart.
7. Ensure that the Bridge LED's are as follows: 1 steady, 1 blinking. If so, your Bridge has been reset, otherwise repeat steps 3 and 4.



Provisioning Your Bridge

Provisioning your Bridge securely transfers your WiFi network name and password into the Bridge.

You will need an unplugged Bridge in hand, and the Mobile App, signed into your account.

1. In the Mobile Application, navigate to "My Devices".
2. Select the "+" button in the Bridges section.
3. Follow the prompts to scan the barcode, choose your wifi network and enter your password.
4. Upon receiving the "Success!" message in the Mobile App, your bridge will be operational and signed in to your WiFi Network.

Power Cycling your Bridge

Occasionally your Bridge will enter an unstable software state, and you will be instructed by customer support to "Power Cycle" your Bridge.

Power cycling clears the Bridges memory, restarts its services, and reconnects it to your WiFi network. This can solve many temporary problems.

1. Unplug your Bridge
2. Wait for 5 seconds
3. Plug your Bridge back in

Reading the LED's

The yellow LED's are invisible when off, which makes it impossible to tell which is LED1, 2, or 3. Additionally the bridge may be installed upside down or sideways, so the orientation of 1-3 is ambiguous.

So here is a very simple way to read them without knowing the order.

- **No lights** means the bridge is not powered.
- **One steady light** and **one blinking light** means the bridge is ready to set up.
- **Two steady lights** means the bridge is already set up
- **A 3rd light occasionally blinking** means the bridge is booting up or updating. It should return to one of the other patterns soon.



- LED 3 blinks once, about 10-12 seconds after the boot process is complete.
- LED 2 is normally on. If it is blinking, that suggests the device is new and ready to set up, or has been physically reset (by pin), and needs to be set up again.
- LED 1 suggests the device is powered. It is almost always on. The moment the unit is plugged in, it will come on.

The Bridge Ports and Connectors

The bridge has some exposed connectors and buttons that provide no functionality to the customer.

- There is an **Ethernet Port** which has been deactivated. It is the largest connector of the left-hand side. This port is used during development, but for security reasons, it has been deactivated.
- There is a **USB Port** adjacent to the Ethernet Port on the left hand side. The USB Port does provide a small amount of power, but no data signal. This port has no function.
- There is a **WPS Button** on the right hand side. It is about 3 mm in diameter, un-labelled, and slightly raised from the side of the bridge. This button is used during development to install new firmware onto the device. This button is active, but its function is NOT WPS. If the user depresses this button while plugging in their bridge, continues to hold it down for 10 seconds, then the bridge will enter a special mode. In this mode the bridge will not operate. The user will need to unplug and plug the bridge back in to restore normal operation.
- On the top end of the bridge is a **Translucent Plastic Window**. It has no function.