



## Set up smart functionality

### Network requirements

The Ivy Home Smart EV Charger will perform best with a stable and strong Wi-Fi internet connection.

Weak or unstable internet connections can limit performance of EV charger and prevent communication with the vehicle.

Note: First plug in the charger in offline mode and confirm that it successfully charges your car before connecting to Wi-Fi.

### Basic requirements

- ✓ 2.4 GHz band Wi-Fi Network (Not 5 GHz)
- ✓ Signal strength of  $-67$  dBm or greater where the charger is located
- \* Some firewalls may prevent or disrupt charger communication

### Connect the charger to Wi-Fi

#### Connect to Ivy app

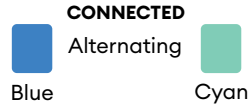
Remove the front cover of the charger to allow for the strongest Wi-Fi signal.

Then follow these steps to connect to Wi-Fi and add your charger to your account:

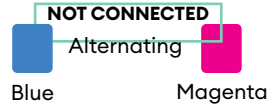
1. Download the Ivy App from the Google Play Store or Apple App store.
2. Sign up for an account.
3. In the Ivy App, select the My Charger screen.
4. Select **Add My Charger**.
5. Select **Ivy Home powered by Grizzl-E** as the Manufacturer and **Ivy Home Smart Charger**
6. **[Black or White]** as the Model.
7. Select the **Next** button.
8. Exit the Ivy App and go to your Wi-Fi Settings.
9. Connect to the Network **UC\_Smart\_ChargerSerial###**.
10. Go back to the Ivy app. The app will verify that you are connected to the charger's network.
11. Select your Wi-Fi network from the list of available networks.
12. Enter the Wi-Fi Password and confirm the password.
13. Select the **Next** button.
14. Wait for the app to connect and register the charger. Do not close the app or run in the background while the setup process is occurring.
15. Attach the front cover back onto the charger once complete.

## Wi-Fi connection indicator

If the connection is successful, the Wi-Fi network **UC\_Smart\_[ChargerSerial#]** will no longer be discoverable and the indicator light on the charger will alternate between Blue and Cyan.



If the connection is unsuccessful, the Wi-Fi network **UC\_Smart\_[ChargerSerial#]** will be visible on devices and the indicator light on the charger will alternate between Blue and Magenta.



## Troubleshoot connection errors

If the charger is not connecting to the network ensure the following:

- Ensure network frequency is 2.4ghz.
- Ensure that signal strength is adequate.
- Ensure Wi-Fi Password is correct.
- Check if Network Filters/Firewalls are blocking charger communication

### 2.4 GHz band Wi-Fi network

The Ivy Home Smart EV Charger only connects to a 2.4ghz Wi-Fi frequency. Ensure your network has a dedicated 2.4ghz Wi-Fi band with its own SSID.

Before connecting the charger, check the network frequency in network properties on your PC or Android.

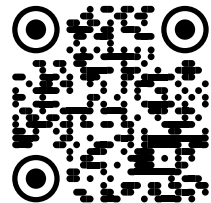
For Dual Band 2.4ghz/5ghz Routers do one of the following:

- Create a separate SSID for the 2.4ghz and 5ghz network. For example, *network\_name\_2.4G* and *network\_name-5G*.
- For routers that have the ability, turn off 5G band and connect to 2.4ghz band.
- Install a 2.4ghz Wi-Fi extender with a separate extension network for the charger.

### Signal strength

Ensure a Wi-Fi signal strength of  $-67$  dBm or greater where the charger is located.

Check your location's Wi-Fi signal strength to ensure a quality EV charging experience. You can use third-party mobile apps available to test the strength. Use your smartphone camera to scan the QR code for options. Ivy does not maintain these apps and cannot guarantee their effectiveness or security.



### **Signal strength (cont'd)**

For locations that don't have a sufficiently strong Wi-Fi signal, follow one of the steps below to improve signal quality:

1. Move the Wi-Fi router as close to your EV charger as possible for the simplest solution.
2. Wi-Fi repeaters or extenders can boost the signal of existing access points.
3. Multiple access points may be required to provide network coverage.

### **Password**

Ensure the Wi-Fi Password entered matches the Wi-Fi network settings exactly. The charger will recycle the connection if password information is incorrect.

The password limit for the charger is 38 characters. The charger will not connect to Wi-Fi networks with passwords longer than this limit.

### **Network Filtering/Firewalls**

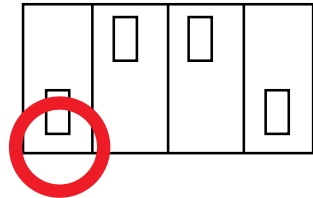
Some firewalls may prevent or disrupt charger communication. Check the blocked clients list in your router settings to see if a Network Filter is blocking the charger. Follow the directions for your router to access the list of blocked clients. The charger will appear on the client list as **esp32-arduino**.

## Disconnect from Wi-Fi

### Reset Wi-Fi

To reset the Wi-Fi on the Ivy Home Smart EV Charger, follow the steps below:

1. Unplug the charger.
2. Remove the front cover by removing the 4 screws at each corner of the charging station. For more information on how to remove the front cover, refer to Chapter 3.1 Adjust Maximum Current Output on page 10.
3. With the front cover placed to the side, locate the DIP switch on the charging station circuit board. The DIP switch is a 4-position switch on the main circuit board, located directly to the left of the LED.
4. Move the DIP Switch #1 to the down position. This applies to all 40A, 32A, 24A amperage settings. For 16A, set DIP #2 to the up position to set the charger to 20A before proceeding.



5. Plug the charger back in. Wait 2 minutes. Ensure the indicator light is Blue/Magenta alternating with 1-second frequency.
6. Unplug the charger again.
7. Set the DIP switch back to the original position.
8. Plug the charger in. It will display the Blue/Magenta alternating indicator light.
9. Follow the instructions from Chapter 8. Set up smart functionality on page 23 to reconnect to your Wi-Fi network and OCPP Network.
10. Replace the enclosure lid by tightening the 4 screws at each corner.