

# Fix a Wi-Fi network connection

To troubleshoot a Wi-Fi network connection, follow these steps.

## Confirm Wi-Fi connection settings

Start to diagnose issues by confirming connection settings.

To confirm connection settings:

1. On your Clover device, tap to open the **Settings** app. (Alternatively, you can swipe down from the top right corner of the screen and then tap **Settings**).
  2. Under **Wireless & Networks**, check to make sure that Wi-Fi is switch to **ON**. If Wi-Fi is switched off, tap to the slide the switch to **ON**. The device automatically searches for available networks within range of this device.
  3. View the list of available networks to find the one you have set up for Clover devices. Clover devices require a WPA2 secured Wi-Fi network. The Clover device might detect an unsecured network, and will prompt you to change your settings to a secure network.
  4. If you don't see any networks, check to make sure the router from your Internet Service Provider is functioning.
    - If the router light shows a steady or blinking green, the router is functioning. Try moving your Clover device and the router closer together.
    - If the router light blinks yellow or red, contact your ISP provider for help.
    - If you have not set up your router yet, contact your ISP provider for help.
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1. Check to make sure that your router is not trying to connect through a firewall. Most routers should work well and be compatible with Clover devices, however, we do not provide any recommendations for routers, nor can we confirm claims that merchants have made. (Some merchants have reported that a Belkin N150 Router works well with their Clover Station. Some merchants have reported that a Century Link router tends not to work well with Clover Station.)
  2. Confirm the connection status: Find the network you want to use and check to make sure it lists a **Connected** status. If not, tap it to make the connection, and enter the network password you created when you set up the network. (You can contact your ISP provider or the person who set up your internet connection to find more information about your network password.)
  3. After connecting, confirm the signal strength: Tap the network name and check for a status of *good* or *excellent*. (Tap **Cancel** to exit the dialog.) If the signal strength is fair, poor, or shown as *none*, your Clover device is having problems connecting to the internet. You may have to select another Wi-Fi network or use your Ethernet connection.
  4. Test the connection by trying to open the Help app.

If confirming the connection settings does not resolve the problem, you can test the connection using other devices.

Next: Connect through other devices

## Connect through other devices

After you confirm connection settings, you can try testing the connection itself by connecting through other devices.

To connect through other devices:

1. Using a smartphone or a laptop, try connecting to the same network as the one whose settings you just confirmed. Use the same password. If you can connect to your Wi-Fi through your smartphone or laptop, the network is functioning.
2. Test the connection from your smartphone or laptop by trying to open the Help app at [help.clover.com](https://help.clover.com).

If you cannot connect, then your network issues may lie with the router or network, and not with the Clover device. In that case, you should contact your ISP provider or your IT personnel.

Continue to the next section.

Next: Disconnect from unused networks

## Disconnect from unused networks

After successful connection, you might still have inconsistent wireless internet performance. If so, other network connections might be interfering with your wireless connection. Clover recommends disconnecting from Internet networks your device does not use.

To disconnect from unused networks:

1. On your Clover device, tap to open the **Settings** app. (Alternatively, you can swipe down from the top right corner of the screen and then tap **Settings**).
2. If Bluetooth or Ethernet are enabled, tap to switch them off. (If your primary connection method is Wi-Fi, disable Ethernet to ensure that Clover devices connect through your primary connection method).
3. Tap **Wi-Fi**.
4. Tap to start disconnecting the first Wi-Fi connection that is not your dedicated Clover internet network.
5. In the dialog box, tap **Forget** to ignore the network.
6. Repeat the disconnection sequence for each network. This ensures that the Clover device only tries to connect to the Internet through the designated Clover Internet network.

Next: Reboot the device

## Reboot the device

Reboot the device to properly reconnect to the internet and fix signal interruptions.

Consider these reasons to reboot:

- If you changed your network settings, but the device does not recognize the new settings
- If your Clover device is working over the network, but showing signs of random dropout of the network signal
- If your Wi-Fi works with some devices and not with others

If the Clover device has a hardwired (Ethernet cable) connection directly to the modem, make sure the Ethernet setting is turned **OFF**. This eliminates confusion in the Clover operating system over which network signal to use.

Next: Improve performance

## Improve performance

In order to properly process transactions, your network must both be stable and have sufficient bandwidth. Unstable networks can cause transactions to temporarily halt, causing the network connection to *time out* and disconnect because the network waited too long for a response. Poor connections can also prevent devices from efficiently synchronizing with each other.

Here are some ways you can improve performance:

- Whenever possible, use your own Internet Service Provider (ISP) rather than a shared network.
- Minimize other high-traffic activity on your local network by limiting traffic such as streaming music or videos. (Use a different network for those.)
- Increase the bandwidth on the local network to minimize disruption of the Clover's communication and processing by reducing the number of other devices connected. The local bandwidth varies based on the number of devices connected to your network and the volume of transactions they normally process.
- Use a recommended hard-wired (Ethernet cable) high-speed Internet connection, such as DSL or cable, rather than a hotspot. This applies particularly if you plan to use more than one Clover device or any peripheral equipment such as a Kitchen Printer.
- Limit the use of hotspot network connections because they can limit the bandwidth required for normal Clover communication. If you plan to use a hot spot, it should be dedicated for Clover use. (Use another hotspot for other Internet needs).

## Still having issues?

If you are still having connection issues, contact Support by tapping or clicking **Call Me** from the device or your Clover Web Dashboard.

# Fix an Ethernet network connection

To troubleshoot an Ethernet network connection, follow these steps.

## Confirm Ethernet connection settings

Start to diagnose issues by confirming connection settings.

To confirm connection settings:

1. On your Clover device, open the **Settings** app. (Alternatively, you can swipe down from the top right corner of the screen and then tap **Settings**).
2. Under **Wireless & Networks**, check to make sure that **Ethernet** is selected. If it is not selected, tap to switch it to **ON**.
3. Check to make sure that the Wi-Fi slider above it is switched to **OFF**. A Clover Mini or Clover Station will automatically connect to a known wireless network. Turning off the Wi-Fi connection forces the Clover device to connect via your Ethernet cable.
4. Tap the **Ethernet** tab. The Clover device loads network information for this device, including the MAC address, IP address, a Proxy settings option, and the network name and connection status.
5. Confirm the connection: If the device was able to connect, you'll see a message confirming successful Ethernet connection.
6. Confirm the IP (Internet Protocol) type. You can contact your ISP (Internet Service Provider) for information about static and dynamic IP connections. You might also need this additional information to complete the IP settings: Gateway, Subnet Mask, DNS1 and DNS2.
  - If the network uses a dynamic IP to connect, make sure **DHCP** is selected.
  - If the network uses a static IP to connect, make sure **Static** is selected and that the Static-specific fields are correctly filled out.
7. Check for proxy server settings. Proxy server settings can interfere with the Ethernet connection. We recommend removing them to avoid problems:
  - Tap the **Proxy Settings** option.
  - Clear the Proxy Settings fields.
  - Tap **Done** to accept changes.
8. To test that the Clover device is properly connected to the network via Ethernet:
  - Tap to return to the **Home** screen.
  - Tap the **Help** app icon.

If the **Help** app loads and you can tap links to access content on Clover Help, then the Clover device is connected to the Internet.

Next: Disconnect from unused networks

## Disconnect from unused networks

After successful connection, you might still have inconsistent wireless internet performance. If so, other network connections might be interfering with your Ethernet connection. Clover recommends disconnecting from internet networks your device does not use.

To disconnect from unused networks:

1. On your Clover device, tap to open the **Settings** app. (Alternatively, you can swipe down from the top right corner of the screen and then tap **Settings**).
2. Disable any secondary internet connections. If Bluetooth or Wi-Fi are enabled, tap to switch them off. Disabling your Wi-Fi ensures that your Clover device connects through your primary and most stable connection.

Next: Reboot the device

## Reboot the device

Reboot the device to properly reconnect to the internet and fix signal interruptions.

Consider these reasons to reboot:

- If you changed your network settings but the device does not yet recognize the new settings
- If your Clover device is working over the network, but showing signs of random dropout of the network signal
- If your Ethernet works with some devices and not with others

Next: Improve performance

## Improve performance

In order to properly process transactions, your network must be both stable and have sufficient bandwidth. Unstable networks can cause transactions to temporarily halt, causing the network connection to *time out* and disconnect because the network waited too long for a response. Poor connections can also prevent devices from efficiently synchronizing with each other.

Here are some ways you can improve performance:

- Whenever possible, use your own Internet Service Provider rather than using a shared network.
- Minimize other high-traffic activity on your local network by limiting traffic such as streaming music or videos. (Use a different network for those.)
- Increase the bandwidth on the local network to minimize disruption of the Clover's communication and processing by reducing the number of other connected devices. The

local bandwidth varies based on the number of devices connected to your network and the volume of transactions they normally process.

- Use a recommended hard-wired (Ethernet cable) high-speed Internet connection, such as DSL or cable, rather than a hotspot. This applies particularly if you plan to use more than one Clover device or any peripheral equipment, such as a Kitchen Printer.
- Limit the use of hotspot network connections because they can limit the bandwidth required for normal Clover communication. If you plan to use a hot spot, it should be dedicated for Clover use. (Use a different hotspot for other Internet needs).

## Still having issues?

If you are still having connection issues, contact Support by tapping or clicking **Call Me** from the device or the Web Dashboard.