



Extending Your Wi-Fi Range with Multiple Links

Link's Wi-Fi radios can now be set to **Client** mode, allowing them to connect to other Link devices for extended network applications. This configuration requires firmware version 1.0.2 or later. Configuration is only required on the Link designated to be used in client mode. The secondary Link is referred to as the **Master**. Note that once configured, both Wi-Fi access points on the master Link are still available, but only one access point on the client Link will be available (the other is used to connect to the master).



Performing a factory reset prior to configuring the Link is recommended.

SETUP

Configuration involves modifications to the LAN and Wireless settings page, all on the client Link.

Configure LAN Settings

From Link's web interface, navigate to *Network > LAN*.

1. Assign an IP address different than the master Link's.

By default, Link's LAN IP address is statically configured to 172.16.1.1. When connecting two Links, ensure they each have unique IP addresses. Enter the new IPv4 address under *Common Configuration > General Setup > IPv4 address*.

- Example 1: master IP is 172.16.1.1, set client IP to 172.16.1.2
- Example 2: master IP is 192.168.1.1, set client IP to 192.168.1.2

2. Disable the DHCP server.

To use the master Link's DHCP server, the client DHCP server must be disabled. Uncheck **Enable** under *DHCP Server > General Setup > Enable*.

3. Save settings.

Click the **Save** button. **Do not click Save & Apply.**

The screenshot shows the Teradek web interface for LAN configuration. The 'Common Configuration' section is active, with 'Advanced Settings' selected. The 'General Setup' tab is open, showing the following settings:

- Status: br-lan, Uptime: 0h 1m 43s, MAC-Address: 04-F3-21-32-30-58, RX: 161.32 KB (1227 Pkts.), TX: 972.03 KB (4451 Pkts.), IPv4: 172.16.1.1/24
- Protocol: Static address
- IPv4 address: 192.168.100.2 (highlighted with a red box and '1')
- IPv4 netmask: 255.255.255.0
- IPv4 gateway: (empty)
- IPv4 broadcast: (empty)
- Use custom DNS servers: (empty)
- IPv6 assignment length: 60
- IPv6 assignment hint: (empty)

The 'DHCP Server' section is also visible, with the following settings:

- Enable: Enable DHCP for this interface. (highlighted with a red box and '2')
- Start: 100
- Limit: 150
- Leasetime: 12h

At the bottom, the 'Save' button is highlighted with a red box and '3'.

Configure Wi-Fi Settings

From the Link's web interface, navigate to *Network > Wireless*, then click **Configure** for whichever interface you want to connect to the master (this interface will no longer provide Wi-Fi to devices).

- Example: The extended network will provide Wi-Fi on the 5GHz channel, so **the client's 2.4GHz radio** will connect to the master's 2.4GHz radio.

1. Configure the radio as a Wi-Fi client.

Set Mode to **Client** (*Interface Configuration > General Setup > Mode*), then enter the ESSID of the master Link (*Interface Configuration > General Setup > ESSID*). Make sure to use the ESSID (network name) for the correct frequency (2.4GHz or 5GHz).

2. Configure Wi-Fi security.

Select the encryption type and enter the network password used on the Master Link's network. (*Interface Configuration > Wireless Security*).

3. Save settings

Click the **Save & Apply** button. At this point, the client Link will reconfigure its network and connect to the master Link. When devices connect to the client Link's Wi-Fi, they will obtain IP addresses from the master Link; the client just forwards traffic between the two.

Navigate to the New IP

To verify that the configuration was performed correctly, navigate to the new IP address configured for the client Link. Note that you may need to disconnect and reconnect to the Link to get a new DHCP address. **NOTE:** Client Link's WiFi networks should be different from the Master Link's network.



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TERADEK Status Network System Logout

Wireless Network: Master "Link-0003 5G" (ath1)

The Device Configuration section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the Interface Configuration.

Device Configuration

General Setup

Status **Mode: Master | SSID: Link-0003 5G**
100% **BSSID: 04:FD:21:32:2F:BB | Encryption: WPA2 NONE (CCMP)**
Channel: 64 (5.200 GHz) | Tx Power: 22 dBm
Signal: -97 dBm | Noise: -95 dBm
Bitrate: 173.3 Mbits | Country: 00

Wireless network is enabled Disable

Channel: auto

Mode: 802.11ac

HT mode: 20MHz

Interface Configuration

General Setup **Wireless Security**

ESSID: Link-0000 5G **1**

Mode: Client

BSSID:

Interface Configuration

General Setup **Wireless Security**

Encryption: WPA2-PSK

Cipher: auto **2**

Key:

Save & Apply Save Reset **3**

NEED MORE HELP?

Go to <http://support.teradek.com> - Contains tips, information and all the latest firmware & software updates.

TERADEK SUPPORT: email support@teradek.com or call (888) 941-2111 ext.2 (Mon-Fri 6am to 6pm PST)