Manual Channel Selection, Transmit Power Adjustment, and Antenna Configuration

Overview

The ability to manually set the Radio Channel and Transmit Power on Meraki MR Access Points, MX64/65/67/68W Security Appliances and Z1/Z3 Teleworker Gateways gives you more granular control over the wireless coverage in your environment. Additionally, certain MR models feature the ability to add and configure External Antennas. You can successfully make these adjustments in the Cisco Meraki dashboard by following the steps below:

MR Access Points

1. Log in to the dashboard.
3. Choose the Band and AP you would like to configure. Then, open the blue Edit settings drop-down menu and select Bulk edit settings:

   ![Radio settings](image)

4. Select the options that require manual configuration:
What settings do you want to change?

- Antenna / antenna gain
- Manually override channel assignment
- Manually override power setting

5. If applicable, select the antenna in use by the AP in the drop-down menu:
6. Select **Manual** to display the available **Radio channels** and then choose the channel the radio will operate on:
7. Adjust the radio **Transmit power** by dragging the slider bar from right to left. Select Review changes to confirm the desired **Transmit power** and proceed to the final review:
8. Once you have confirmed the changes, select **Apply changes**. Please note that clients will be disconnected briefly when you change channels or power levels:
MX64/65/67/68W and Z1/Z3

1. Log in to the dashboard.
3. Under Channel Settings, use the Channel field to adjust the channel the indicated radio will operate on, and Transmit power to indicate what power level to use.
4. Select the Save changes button. Please note that clients will be disconnected briefly when you change channels or power levels.

Best Practices

Manually setting the channel can improve roaming performance for clients who cannot seamlessly roam between APs on different channels. However, manual channel selection can also increase the amount of co-channel interference produced by nearby APs if using the same channel. Co-channel interference can also be improved by reducing the Transmit Power on nearby APs. When unsure if manual settings are needed, leave channel and power settings on Auto.

Note: The 2.4GHz radio on an MR access point can have its power set to “off.” This will prevent this particular unit from serving clients with its 2.4GHz radio. Please reference the following article for further information on Disabling 2.4GHz.