How to configure Access Point as a Repeater to expand wireless network range

Instructions for Macintosh users
How to setup Edimax Access Point by a Macintosh computer

Introduction

The Access Point uses a default IP 192.168.2.1 which may not be in the same IP address subnet of your network. Therefore, in order to login to the web page of 192.168.2.1, you will need to modify the IP address of your Macintosh computer to be 192.168.2.10. We prefer to use an Ethernet cable to connect the Macintosh computer to the LAN port of Edimax wireless Access Point.

Step 1. Understand the IP address used in your network.

1. Have your Macintosh computer operate as usual.
2. Go into System Preferences.
3. In System Preferences, Go to Network.
4. Select the adapter you are currently using. It could be an Airport card, a third-party Wireless card, or an Ethernet Adapter.
5. Write down the IP address, subnet mask, Router, and DNS server address.
6. We use an usb wireless card in this example. Its IP address 10.0.1.2 told us that the IP addresses used in the network are 10.0.1.x.
7. All the devices in the network have the same first three octets of IP address, but the last octet number must be different. You may want to assign a new IP address to the Wireless Access Point once you can login the configuration page of Access Point later. This step is optional. You can keep the default IP 192.168.2.1 address for Wireless Access Point but you will need to the procedure in this guide everytime while you need to configure the Access Point.
8. We temporarily disconnect the wireless adapter. You can turn off your Airport adapter if you use it to get on Internet.
9. From now on, we use Ethernet adapter to configure the Access Point.
Step 2. Use an Ethernet cable to connect from Edimax Access Point to the Ethernet port of your Macintosh. Power on the Edimax Access Point. Its LAN LED should be lit up.

At this stage, the Ethernet port of Macintosh is connected to the LAN port of Edimax Access Point.

Network preferences show Ethernet adapter has “Self-Assigned IP” because it does not get IP address from the network.

Select “Ethernet” on the left panel. Click on dropdown arrow for the box of “Configure”, select “Manually”. We will assign the Ethernet adapter with a Manual IP address.

Enter IP address 192.168.2.10 and subnet mask 255.255.255.0. Click on Apply button.
After the Apply button is pressed, Ethernet adapter on the left panel shows “Connected”.

Close the Network preferences window.

Step 3. Open Safari or Firefox. Enter address [http://192.168.2.1](http://192.168.2.1) which is the default IP of Edimax Access Point.

Open Safari or FireFox browser.

There is no Internet at this point.

Go to the Address box, enter http://192.168.2.1 hit Enter

The pop up window asks for username and password.

Enter the username: admin
Enter the password: 1234

Click “Log In” button.

After “Log In”, you will see the web page of the Access Point and you can start its configuration.

Please refer the user manual about the settings of the Access Point.

Later after the configuration is completed, you can turn on your airport wireless card to connect to the Access Point.
Step 4. Go to Basic Setting. Set up Universal Repeater.

In Basic Settings, select the mode as “Universal Repeater” mode.

Click on “Select Site Survey” button.

Select your wifi network, click on “Connection”.

The Root AP SSID is your main wifi router. The Main ESSID is the SSID of the repeater. They should use different SSID so that you know which device your wireless computer associates with.

Click on Apply.

If your existing wireless network has no wireless security, you can click on Apply button to save settings and restart EW-7416APn/EW-7228APn.

If your existing wireless network has wireless security like WEP or WPA, click on “Continue” so you can setup the security in EW-7416APn/EW-7228APn.

Left picture is an example for WPA2-PSK AES network. Select the right Encryption. Enter WPA2 pre-share key into the field. Click on Apply. You can click on Apply button again.

Step 5. Change the Mac computer back to Ethernet adapter’s original state and see if you have Internet

Make Ethernet adapter of the Macintosh from “Manually” to “Using DHCP”. It should receive an IP address from the main wifi network. The Ethernet connection should have Internet. Verify it by opening web browser.

If that works, then you can unplug the Ethernet cable and use wireless connection.

Make sure you turn on the wireless adapter and have it connect to the repeater. If it can get on Internet, the repeater is successful. You can move the repeater to a further and appropriate location.