

LEGAL AND REGULATORY INFORMATION

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FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC ID: W59XAP1510  
IC: 8584A-XAP1510

FCC Statement—Wireless FCC 2.4GHz & 5GHz 802.11abgn

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

Hereby, Luxul, 14203 Minuteman Drive, Suite 201, Draper, Utah, 84020, declares that this Luxul XAP-1510 is in compliance with the essential requirements and other relevant provisions of Directive 1995/5/EC. For a copy of this report send a self-addressed stamped envelope to: Luxul CE, 14203 Minuteman Drive, Suite 201, Draper, Utah, 84020.

Industry Canada (RSS-Gen Issue 4)  
CAN ICES-3(B)/NMB-3(B)

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READ ME FIRST

QUICK INSTALL GUIDE



High Power AC1900  
Dual-Band Wireless Access Point  
XAP-1510

Includes:

- One: High Power AC1900 Dual-Band Wireless AP
- Two: Mounting Brackets and Hardware
- One: PoE Injector and Power Adapter
- One: Ethernet Cables



READ ME FIRST - CONTROLLER COMPATIBILITY

This XAP-1510 is compatible with the Luxul Wireless Controller for fast, easy configuration and deployment of wireless networks with multiple APs.

**Note:** If you'll be using this AP with a Wireless Controller, refer to the Quick Install Guide included with the Wireless Controller for setup instructions.

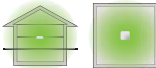
AP SETUP AND CONFIGURATION

1 Physical Installation

The XAP-1510 access point is designed for simple and efficient installation and can be located one of three ways. First, the included mount is designed to attach directly to several different regions' standard electrical boxes. Second, the XAP-1510 may be mounted on a ceiling or wall without a box by using the included mount as a guide to mark attachment locations. Finally, the XAP-1510 can be placed on a flat surface by attaching the included rubber feet to the mount.

**Caution:** Attach the rubber feet to the mount and attach the mount to the AP for flat surface placement to avoid overheating and failure.

**Single Access Point Placement:** Because the signal generated by the XAP-1510 is omnidirectional, the unit should be located as near as possible to the center of the desired coverage area.



XAP-1510 Single AP Coverage Pattern

**Multiple Access Point Placement:** You may need to experiment with AP placement to optimize the roaming experience. Place APs to ensure adequate coverage, but not so far apart that there is no signal overlap. Adjacent APs should overlap enough that the client device has a good connection to the AP to which it is currently attached, but also sees the next-nearest AP. Ideally, roaming clients should see signal strength of two overlapping APs in the range of -60 to -70 dBm at the midway point between two APs. To learn more about AP placement, visit [luxul.com/ap-placement](http://luxul.com/ap-placement).



XAP-1510 Multiple AP Coverage and Overlap

**Note:** Consider using Ekahau HeatMapper to assist with this process, available from [www.ekahau.com](http://www.ekahau.com). Luxul also offers an informative "How-To" video on HeatMapper at [luxul.com/how-to-videos](http://luxul.com/how-to-videos).

AP SETUP AND CONFIGURATION CONT.

2 Connecting Ethernet and Power

Ethernet and Power

To apply power and network simultaneously, simply connect one end of an Ethernet cable to a PoE switch, and the other end to the XAP-1510 PoE port.

To connect power and Ethernet separately, first connect an Ethernet cable from the supplied PoE Injector **Data & PWR Out** port to the PoE port on the XAP-1510. An Ethernet cable length of up to 300 feet can be used.

Next, connect an Ethernet cable from your Router or Switch to the **Data IN** port on the PoE Injector. Finally, connect the AC cord to the included PoE Injector, then to the AC outlet.

**Note:** Category-6 shielded twisted pair is recommended for best results and stable data transmission at the highest data rates. However, CAT5/CAT5e/CAT6 UTP cable can also be used.

PoE Injector Setup

- **Data In:** Connect an Ethernet cable from your router or switch to the **Data In** port of the included PoE Injector
- **Data & PWR Out:** Connect an Ethernet cable from the **Data & PWR Out** port of the included PoE Injector to the PoE Port of the XAP-1510
- **AC Power:** Connect the included AC Cord to the Power Input of the Included Injector first and then to the AC outlet.



3 Preparing for Access

IP Addressing

If the XAP-1510 is connected to a network with a 192.168.0.X address scheme, and your computer shares a similar address on the same network, you can skip to the next step, **Access and Setup**.

**Note:** If another device on your network shares the 192.168.0.10 address, you'll need to temporarily reassign or remove that device while you configure the XAP-1510.

If your network uses an address scheme other than 192.168.0.X, you'll need to set a temporary static IP address on the computer you're using for configuration. To do so, set the IP address of your computer to an address in the 192.168.0.X range, then set the Gateway/Router address to 192.168.0.10 (the default IP address of the XAP-1510).

Once you're finished configuring the AP, you can return your computer's IP configuration to normal, typically "Obtain Automatically"/DHCP."

**Note:** Visit <http://luxul.com/ip-addressing> to learn more about changing your computer's IP address and getting connected.

4 Access and Setup

Getting Connected

- **Connecting Via an Ethernet Device:** Use Ethernet cable to connect your computer to the PoE switch or PoE injector to which the XAP-1510 is connected. Ethernet is the preferred method of connection.
- **Connecting Via a Wireless Device:** Connect your client device to the XAP-1510 default wireless network named Luxul1510. The wireless network will run in Open Security mode, so no passphrase is required until Wireless Security is configured.

Logging In

To access the AP's web configuration, open your web browser and enter the AP's default 192.168.0.10 IP address in the address field. Log in to the AP using the default user name and password:

Default IP: 192.168.0.10  
Username: admin  
Password: admin

**Note:** If another device on your network shares the 192.168.0.10 address, you'll need to temporarily reassign or remove that device while you configure the XAP-1510.

**Note:** The XAP-1510 is not a router and will need to be connected to a network with a router in order to deliver Internet access.

5 Hardware Operation

LED Indicators

**Enclosure:** If the green Power LED is on, the XAP-1510 is powered and working. If the Power LED is OFF, the AP is not receiving power or the LED has been turned off in the AP's web interface. If the green Power LED is blinking, the XAP-1510 is booting. The two blue LEDs indicate each of the 2.4GHz and 5GHz networks are configured and broadcasting.



XAP-1510 LEDs

**PoE Injector:** If the PWR LED is On, Power is Connected to the injector. If the PWR LED is Off, the injector is not receiving power.

Reset Button

The Reset button is located underneath the mount and marked RESET. It may be used to reboot the AP or to restore factory default settings.

**Reboot the AP:** With the XAP-1510 powered on, simply press and release the Reset button.

**Restore Factory Defaults:** With the XAP-1510 powered on, press and hold the Reset button for 10 seconds, then release the button and the XAP-1500 will restore factory defaults and reboot.

**CAUTION:** Holding the Reset button for more than a few seconds will restore the AP to factory default and remove any custom configuration.



## REGULATORY COMPLIANCE AND SAFETY NOTIFICATION

This documentation contains regulatory compliance and safety information for both wireless and non-wireless hardware. Not all the information contained in this document applies to every product.

### FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### Regulatory Compliance

The device complies with internationally recognized standards covering human exposure to electromagnetic fields from radio devices. This equipment also complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 30cm (11.8 in) during normal operation.

Unauthorized antennas, modifications, or attachments could cause damage and may violate regulatory approvals. Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate the equipment.

Luxul equipment marketed in the U.S. is restricted to usage of channels 1-11 only for 2.4GHz and channels 100-140/149-165 for 5GHz.

### FCC Statement—Wireless FCC 2.4GHz & 5GHz 802.11b/g/n/ac

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Refer to included Quick Installation Guide for device-specific FCC Class information.

**FCC Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

- ▶ This device complies with part 15 of the FCC Rules.
- ▶ This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### Warnings and Safety Information

- ▶ Verify that the electrical circuits have appropriate grounding and overload protection.
- ▶ Attach only approved power cords to the device.
- ▶ Verify there is adequate ventilation around the device, and that ambient temperatures meet equipment operation specifications.
- ▶ DO NOT install in or near hot or humid places, such as a kitchen or bathroom. Take care to minimize exposure to excessive heat or moisture.
- ▶ Small parts and plastic bags used for packaging may be harmful to small children. KEEP ALL ACCESSORIES OUT OF THE REACH OF CHILDREN!
- ▶ This product may become hot when in use for extended time periods. This is normal and is not a malfunction. DO NOT install where it will be exposed to paper, cloth or other flammable materials.

### Health and Safety Recommendations

**Warnings for the use of Wireless Devices:** Please observe all warning notices with regard to the usage of wireless devices

**Potentially Hazardous Atmospheres:** You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants, and other similar areas where the air contains chemicals or particles (such as grain, dust, or metal powders).

**Safety in Hospitals:** Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely affected.

### RF Exposure Guidelines

**Safety Information:** The device complies with internationally recognized standards covering human exposure to electromagnetic fields from radio devices.

#### Warning: Exposure to Radio Frequency (RF) Radiation:

The radiated output of this device is below the FCC radio frequency exposure limits. Nevertheless, the device should be used in such a manner that the potential for human contact during normal operation is minimized.

- ▶ The end user must avoid any extended human RF exposure directly in front of the device, up to a distance of 30cm (11.8in), when unit is on.
- ▶ When servicing the equipment and selecting a location for the antennas, it is important to note that a minimum distance of 30cm (11.8in) is required between personnel and the device or antenna to comply with the radio frequency exposure limit.

#### The following safety precautions should be observed:

- ▶ Do not touch or move the antenna while the unit is transmitting or receiving.
- ▶ Do not hold any component containing the radio such that the antenna is very close or touching any exposed parts of the body, especially the face or eyes, while transmitting.
- ▶ Do not operate the radio or attempt to transmit data unless the antenna is connected; this behavior may cause damage to the radio.

### Industry Canada (RSS-Gen Issue 4)

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 35 centimeters between the radiator and your body.

Cet émetteur ne doit pas être Co-placé ou ne fonctionnant en même temps qu'aucune autre antenne ou émetteur. Cet équipement devrait être installé et actionné avec une distance minimum de 35 centimètres entre le radiateur et votre corps.

#### Caution :

(i) the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Avertissement:

(i) les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

CAN ICES-3(B)/NMB-3(B)