

READ ME FIRST

QUICK INSTALL GUIDE



Wireless Controller XWC-1000

Includes:

- ▶ One: XWC-1000 Wireless Controller
- ▶ One: Rack Mount Kit
- ▶ One: Power Cord

LUXUL

READ ME FIRST - AP COMPATIBILITY

Your XWC-1000 Wireless Controller is compatible with several different models of Luxul Access Points. If you are using separately-purchased Luxul APs or installing a Wireless Controller in an existing Luxul deployment, you may need to manually upgrade AP firmware before installing the Wireless Controller.

Luxul APs running firmware version 5 or later are Controller-compatible and can be used with the Controller as-is. When purchasing Luxul APs for use with the Wireless Controller, look for an orange “Version 5 Firmware” sticker on the box to avoid the manual upgrade process.



- ▶ **Access Point Compatibility:** The XWC-1000 Wireless Controller is compatible with the following Luxul AP models: XAP-310, XAP-1210, XAP-1230, XAP-1500.

Access Point Upgrade Instructions:

⚠ Caution: *It is not possible to downgrade the AP from firmware version 5, so upgrade only if you are certain you don't want to go back.*

1. Make sure the XWC-1000 Wireless Controller is disconnected from the network or powered off during the AP upgrade process.
2. Use your computer to download the firmware file for your AP from luxul.com/firmware-updates
3. Open the APs web interface by entering the IP address of the AP in your computer's browser and select Administration » Firmware Update
4. Click the Browse button and select the firmware file you downloaded, then click Open
5. Click the Upgrade button. You should now see a status indicator to let you know the firmware upgrade is in progress.
6. Once the power LED starts blinking, close the browser used to access the APs web interface.
7. Once the power LED stops blinking, open a new browser window and re-enter the IP address of the AP. Restore the APs factory default settings by using the web interface or the Factory Default button on the AP. The AP is compatible with the XWC-1000 Wireless Controller only after it is restored to factory default condition.
8. The AP is now compatible with the Wireless Controller. Power down the AP until the Controller Setup Wizard instructs you to apply power to the AP.

Repeat this process for any other APs which require a manual firmware upgrade and that you wish to manage with the XWC-1000 Wireless Controller.

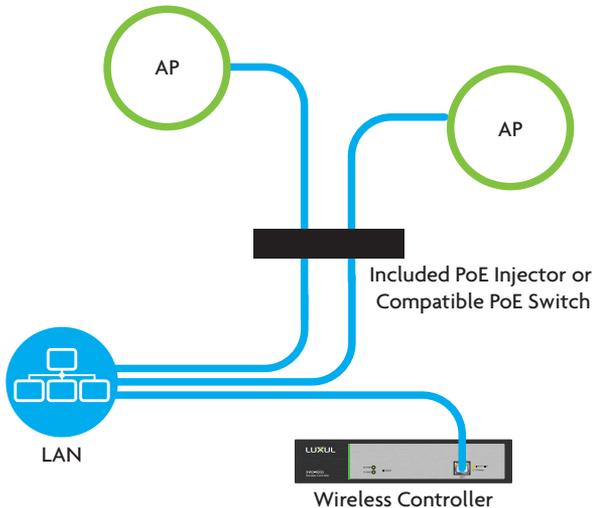


BEFORE YOU BEGIN INSTALLATION

- ▶ **Access Point Firmware:** If you are using APs other than those included in a kit, please refer to READ ME FIRST - AP COMPATIBILITY on the previous page.
- ▶ **Controller Setup Sequence:** Be sure to setup the XWC-1000 Wireless Controller BEFORE powering up the APs. Once logged into the Wireless Controller, the Setup Wizard will prompt you when it is time to add the APs to the network. A DHCP server is required on the network.
- ▶ **Accessibility:** Once an Access Point is controlled by the XWC-1000 Wireless Controller, the web interface on the AP is no longer enabled. Conversely, if an AP configuration is managed via its web interface, communication with the XWC-1000 Wireless Controller will be disabled. To change an AP from Controller-managed to standalone (or the reverse), restore the AP to Factory Default.
- ▶ **Firmware Updates:** The XWC-1000 Wireless Controller automatically checks for firmware updates of Controller-compatible APs and the Wireless Controller itself, but requires Internet access to do so. The Wireless Controller will still operate without Internet access, but firmware updates will not be available.

Physical Installation

- ▶ **Connecting Devices:** The XWC-1000 Wireless Controller simply connects to the network along with any compatible Access Points via PoE.

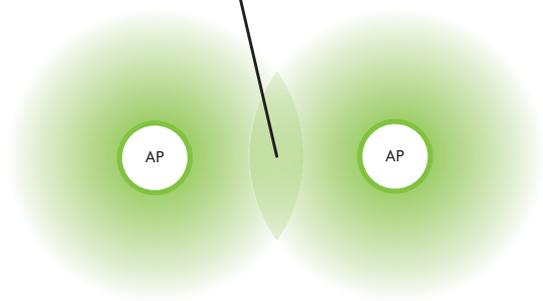


⚠ CAUTION: *The XAP-1500 will only work properly when connected to the provided PoE Injector*

► **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.



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✓ **Note:** Consider using Ekahau HeatMapper to assist with this process, available from www.ekahau.com. Luxul also offers an informative “How-To” video on HeatMapper at luxul.com/how-to-videos.



WIRELESS CONTROLLER SETUP

1. Use an Ethernet cable to plug the XWC-1000 Wireless Controller into the network. Do not connect any APs to the network yet.

✓ Note: *Be sure a DHCP server is present on the network and that all Luxul APs and the XWC-1000 Wireless Controller will share the same subnet. If your network uses a 192.168.0.X IP address scheme, you are ready to start the setup process. If not, you will need to manually change the IP address of your computer to be able to configure the XWC-1000 Wireless Controller so that it is on the same subnet as your network. For help setting the IP address of your particular operating system, visit luxul.com/ip-addressing.*

2. To access the Setup Wizard, open your web browser and enter the Wireless Controller's default 192.168.0.19 IP address in the address field. Log in to the Wireless Controller using the default user name and password:

Default IP: 192.168.0.19

Username: admin

Password: admin

✓ Note: *If there is another device on the network already using the 192.168.0.19 address, you'll need to either temporarily disconnect or reconfigure that other device, or manually configure the Wireless Controller with a different address on a separate isolated network.*

3. Follow the built-in Setup Wizard in the Wireless Controller. The Wizard will direct you to power the APs on at the appropriate time and walk you through completing the setup.

📌 Smart Tip: *For more information on setup and configuration best practices, visit luxul.com/smart-tips.*

RESETTING THE CONTROLLER

- ▶ **Reset/Reboot:** Use a paper clip to press and release the reset button on the front panel of the Controller to force it to reboot. The LEDs will go dark once the button is released, then blink slowly while the controller boots.
- ▶ **Restore Factory Defaults:** To restore the controller to Factory Default configuration, press and hold the reset button for at least 5 seconds. The System LED will blink quickly to indicate that the Controller is returning to Factory Default configuration, go dark for a few seconds, then blink slowly while the controller reboots.
- ▶ **Normal Operation:** When the controller is operating normally, the System LED will blink like a heartbeat, i.e. blink-blink-dark.

LEGAL AND REGULATORY INFORMATION

No part of this publication may be modified or adapted in any way, for any purposes without permission in writing from Luxul. The material in this manual is subject to change without notice. Luxul reserves the right to make changes to any product to improve reliability, function, or design. No license is granted, either expressly or by implication or otherwise under any Luxul intellectual property rights. An implied license only exists for equipment, circuits and subsystems contained in this or any Luxul product.

FCC Statement

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.

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.



Hereby, Luxul, 14203 Minuteman Drive, Suite 201, Draper, Utah, 84020, declares that this Luxul XWC-1000 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)

This device complies with Industry Canada's licence-exempt RSSs. 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; (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

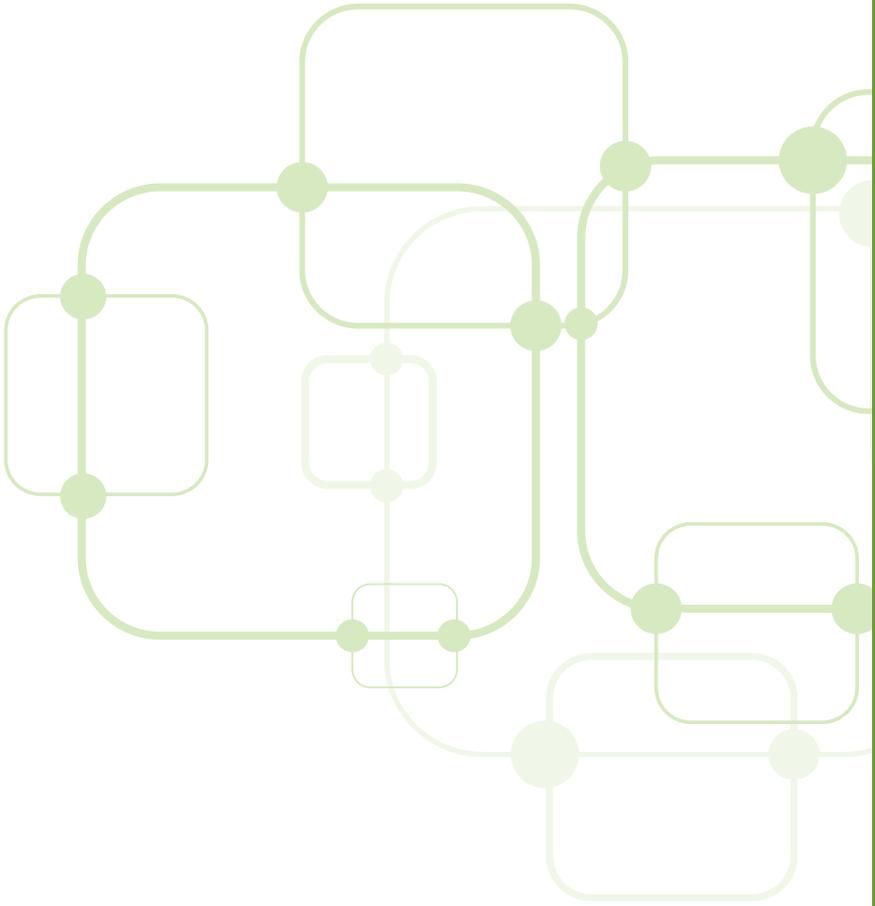
The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

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 20 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 20 centimètres entre le radiateur et votre corps.

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



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Technical Support

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