Overview

The NXB-CCG-K NetLinx Clear Connect Wireless Gateway (**FG2606-868**) connects NetLinx Controllers with Lutron's Clear Connect Occupancy Sensors. The Gateway includes a web interface for simplified integration, configuration, and programming of Clear Connect devices. When integrated with an AMX NetLinx Controller, installers now have a simple and cost-effective path to offer smart room automation that includes light and AV control from a single interface, occupancy sensing, scheduled shutdown and energy management.
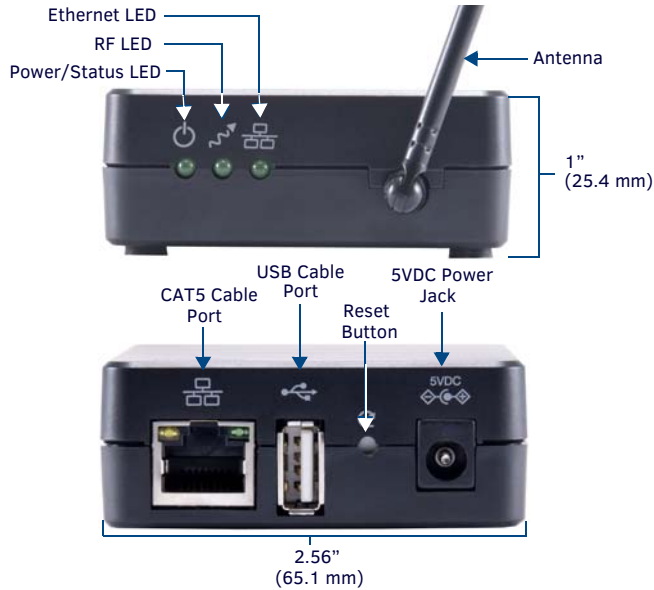

FIG. 1 NXB-CCG-K CLEARCONNECT WIRELESS GATEWAY

Product Specifications

NXB-CCG-K SPECIFICATIONS	
Power Requirements:	• **Power Input:** 600mA @ 5VDC, DC adapter optional (5V DC, 3A). • **Surge Protection:** To withstand surge voltages without damage or loss of operation, in accordance with IEEE C62.41-1991 Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits. • **Power Failure Memory:** Should power be interrupted, the NXB-CCG-K will return to its previous state when power is restored.
Front Panel Components:	
Power/Status LED:	Displays power status and other system status indicators.
RF LED:	Displays the Tx / Rx activity on the RF link.
Ethernet LED:	Displays the connection status and Tx / Rx activity on the Ethernet link.
Rear Panel Components:	
CAT5 Cable Port:	Maximum cable length: 328 ft (100 m)
USB Cable Port:	Manufacturer use only.
Reset Button:	Press and hold for 20 seconds to restore the system to the Factory Default settings.
Power Jack:	(IEC PELV / NECR Class 2). This product should be connected to a safety isolating supply conforming with EN61558.
Operating Environment:	• 32 °F to 104 °F (0 °C to 40 °C), 0% to 90% humidity, non-condensing. • Indoor use only.
ESD Protection:	ESD protection to withstand electrostatic discharge without damage or memory loss, in accordance with IEC 61000-4-2.
Communications:	• The NXB-CCG-K communicates to other Clear Connect devices through RF. • All devices must be located within 30 feet (9 m) of the NXB-CCG-K.
Auto Discovery:	Supports the ZeroConf auto discovery protocol.
Dimensions (HWD):	• *Without antenna:* 1" x 2 9/16" x 4 7/16" (25.4 mm x 65.1 mm x 112.7 mm) • *With antenna:* 3 2/16" x 2 9/16" x 4 7/16" (79.4 mm x 65.1 mm x 112.7 mm)

NXB-CCG-K SPECIFICATIONS (CONT.)	
Weight:	0.3 lbs (136.08 g)
Certifications:	• CE
Included Accessories:	• NXB-CCG-K Installation Guide (**93-2606-68**)
Other AMX Equipment:	• CCD3-OCRB-P-WH, 868 MHz Ceiling Mount Occupancy/ Vacancy Sensor (**FG2606-44-WH**) • PS-CCG 5 VDC, 3A Power Supply With 2.1mm Barrel Connector (**FG423-61**)

Important Notes

Proper orientation of the antenna helps ensure maximum range and the best performance. The NXB-CCG-K should be positioned centrally to the devices being controlled, and as high and clear of obstructions as possible. The NXB-CCG-K utilizes an omni-directional antenna, which produces a circular pattern perpendicular to the antenna. For best performance, the antenna should be positioned vertically (tip up or down, not sideways). Try to keep the antenna at least 2 feet from metallic objects.

RF Device Placement: All dimmers, switches, keypads and shades / draperies must be located within 30 ft (9 m) of the NXB-CCG-K (FIG. 2).
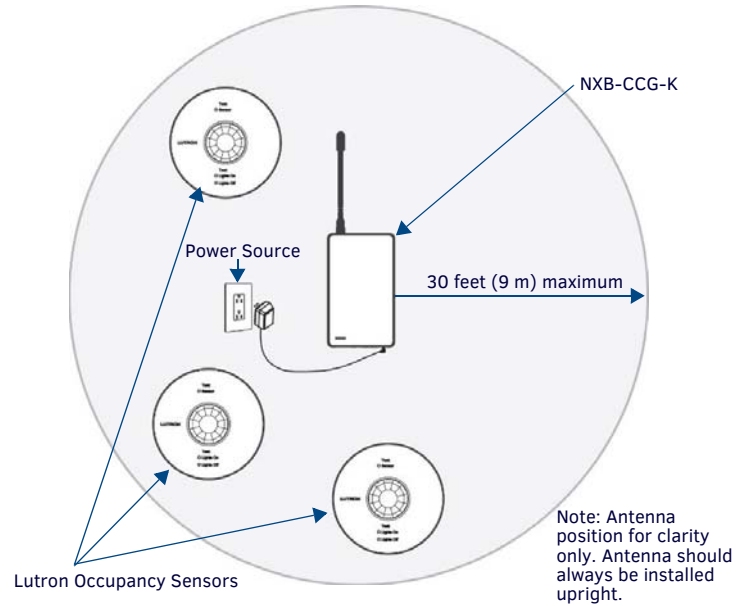

FIG. 2 RF CONFIGURATION OF NXB-CCG-K AND OCCUPANCY SENSORS

Codes: Install in accordance with all local and national electrical codes.

WARNING: Using a DC adapter not rated at the proper specifications could damage the NXB-CCG-K.

Cleaning: To clean, wipe with a clean damp cloth. DO NOT use any chemical cleaning solutions.

Installation

1. Find a suitable location for the NXB-CCG-K.

   NOTE: Proper orientation of the antenna helps ensure maximum range and the best performance. The NXB-CCG-K should be positioned centrally to the devices being controlled, and as high and clear of obstructions as possible. For best performance, the antenna should be positioned vertically (tip up or down, not sideways). Try to keep the antenna at least 2 feet from metallic objects.

2. Mount vertically or horizontally (FIG. 3), using two #6 (M3) screws. When mounting, allow 7 in (177.8 mm) clearance for the antenna and ensure convenient access to the power plug. In order to achieve proper RF performance, do not mount unit in a metal enclosure.

3. Attach the DC adapter cord to the power jack on the NXB-CCG-K and insert the DC adapter plug into a receptacle.
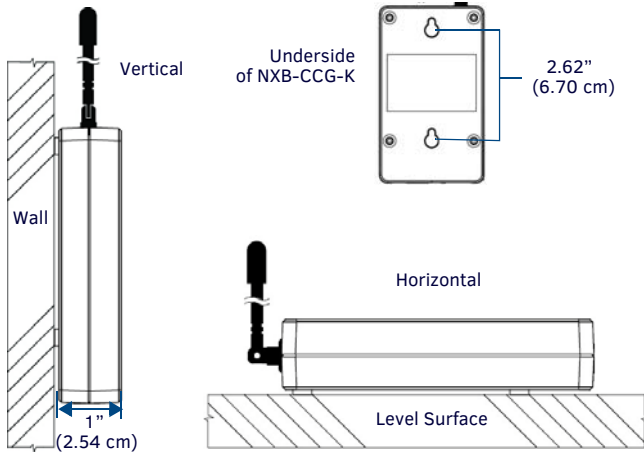
FIG. 3 INSTALLATION DIAGRAM

4. Use CAT5 Ethernet cable to connect the NXB-CCG-K to the chosen network's Master. Please refer to the Ethernet Pin Numbering diagram (FIG. 4) for the correct connection.

Returning an NXB-CCG-K to Factory Default Settings

Note: Returning an NXB-CCG-K to factory default settings will erase all programming from it and will require the device to be reprogrammed into the system. Devices connected to the NXB-CCG-K will need to be reset separately to their factory defaults before they can be reconnected.

1. Press and hold the **Reset** button (FIG. 1) on the device for 20 seconds.
2. The Power/Status LED will start flashing slowly for approximately 10 seconds, after which it will start rapidly flashing for approximately 20 seconds and then remain on.
3. The device has been returned to its factory default settings.

Ethernet Pin Numbering

The numbering for pins in the Ethernet port is as follows:

ETHERNET PIN NUMBERING		
Ethernet:	**Pin #:**	
T+Ve	1	
T-Ve	2	
R+Ve	3	
R-Ve	6	

Web Interface Pages

NOTE: This product contains licensed software; see the SOFTWARE NOTICES AND LICENSES link on the Web interface login screen for software notices and license information.

The NXB-CCG-K feature a built-in zero-configuration networking client that allows you to determine the unit's IP address via NetLinx Studio v3.0 (or higher), or a similar zero-configuration client or browser. Entering the device's IP address in an enabled browser (Mozilla Firefox and Apple Safari for PCs and Firefox and Safari for Macintoshes) allows the device to be accessed in that browser. Once contact is established, and a username and password entered, the Web interface pages may be reached and updated.

Zero-configuration (or Zero-Config) technology provides a general method to discover services on a local area network. In essence, it allows you to set up a network without any configuration.

Accessing the Web Interface Pages

To access the Web interface pages:

1. From any computer or Netbook that has access to the LAN on which the NXB-CCG-K, open a web browser and type the IP address of the target NXB-CCG-K unit in the Address Bar.
2. In the *Login* page, enter your username and password. (The default username and password are *admin* and *1988*.)

Configuring the NXB-CCG-K

Once logged in, the Web interface automatically opens to the *Settings* tab of the *Configure* page. From here, the administrator may access other tabs and pages to add or change Web and integration logins and passwords, change network or security settings, add devices to a network, or control the programming of buttons on an individual device.

Adding Integration Logins

To add a new user login:

1. From the *Configure* page, select the *Integration Logins* tab.
2. Click the **New Integration Login** button.
3. Enter the new username and password and click **Create**.

   NOTE: The user login must be alphanumeric, with no spaces or punctuation.
4. The new username will appear in the *Integration Logins* tab.

Changing Integration Passwords

To change a user's password:

1. From the *Configure* page, select the *Integration Logins* tab.
2. In the appropriate user entry, select **Change Password**.
3. Enter the new password and click **Change**.
4. The new password is now enabled.

Removing Integration Logins

To remove a user login:

1. From the *Configure* page, select the *Integration Logins* tab.
2. In the appropriate user entry, select *Delete User*.
3. Confirm that you wish to remove this user by clicking **Yes**.

For more information on using the Web interface pages, please refer to the *NXB-CCG-K Operation Reference Guide*, available from **www.amx.com**.