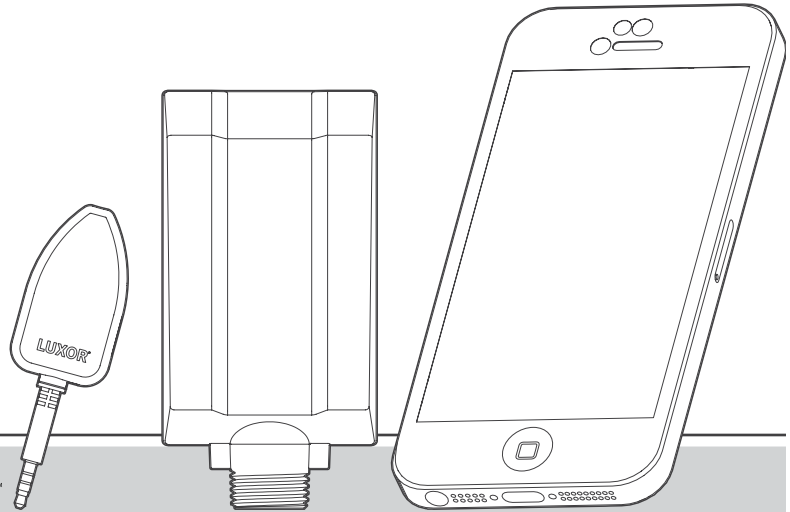


LUXOR® Accessories

WI-FI SYSTEM COMPONENTS



ACTIVassign™

Luxor Wi-Fi Control System

Lighting Accessories by Hunter Industries

Table of Contents

3	Wi-Fi Overview
3	Overview
3	Components
4	Glossary of Terms
5	Wi-Fi Installation
7	Wi-Fi Setup
7	Setup
7	Connecting to an Existing Network (Wi-Fi Module)
10	Connecting to an Existing Network (LAN)
12	Direct Connect
14	Multiple Controllers
15	Wi-Fi Care and Maintenance
15	Wi-Fi Tips
16	Troubleshooting
17	Wi-Fi Legal Information
17	Regulatory and Legal Information
18	Approved External Antenna Types
19	Notes

Controllers with Luxor technology are capable of communicating with iOS® and Android™ smart devices for on-demand changes to your outdoor lighting system.

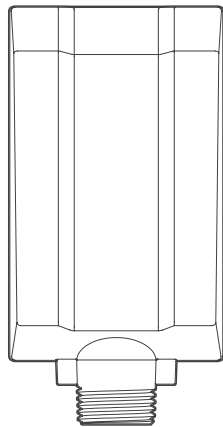
Overview

Components

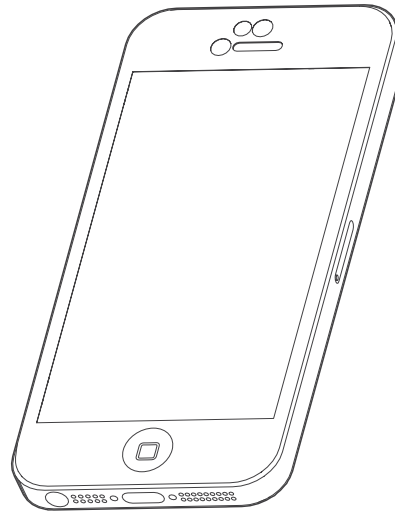


ACTIVassign™

LAM Module



Wi-Fi Module



iOS or Android smart device

Glossary of Terms

Group: An addressed set of lights that is designated numerically and controlled as a set by the controller

Theme: A predetermined set of groups, intensities, and colors called to action by the program or manual functions

Fixture/Luminaire: Light unit that contains any low-voltage LED board or device with ZD Technology® or ZDC Technology®

Intensity: Value indicating measurable amount of brightness, from 1% to 100%

Event: The initiation, adjustment, or conclusion of a selected theme or group with specific intensity and/or color settings

Duration: The length of an event

Hue: The primary attribute of a color represented by values from 0 to 359

Saturation: The richness of a color mixed with white light, from 0% to 100%

Color: The visual combination of hue and saturation

LAM: Light Assignment Module; a device that remotely assigns each low-voltage LED fixture or device with ZD Technology or ZDC Technology to a specific group

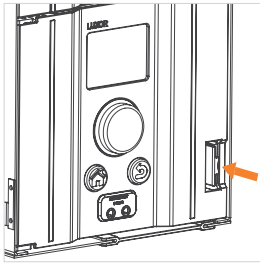
RSSI: Relative Signal Strength Indicator, or a number representing Wi-Fi signal strength

Direct Connect: A Wi-Fi mode using the Wi-Fi Module allowing the controller to broadcast its own network for connection with one smart device

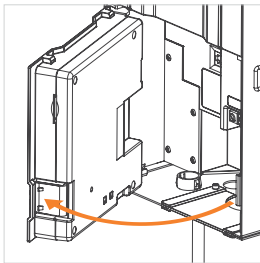
LAN: Local Area Network; controller can connect directly into a network through a Cat 6 cable

Router: A networking device that allows computers and electronic devices to exchange data

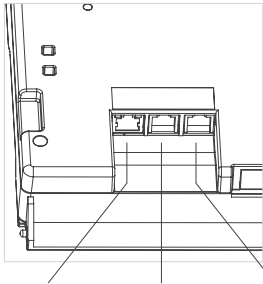
SSID: Service Set Identifier, or the unique identifying name for a wireless LAN



Step 1: Press lever to the left.

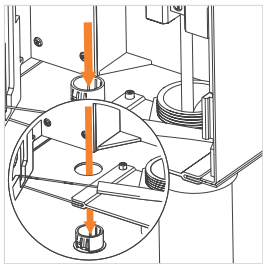


Step 2: Pull facepack outward.



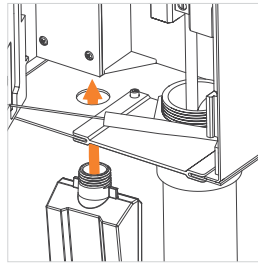
LAN DMX Wi-Fi

Step 3: Insert Wi-Fi or LAN cable.

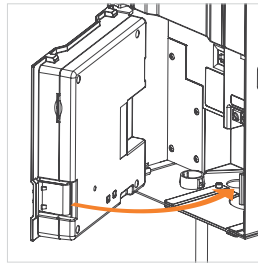


Step 4: Remove plastic cap by pressing tabs and pushing down.

WI-FI MOD ONLY: Ensure the facepack locks into place and antenna wire is seeded through the wire slot. **DO NOT PINCH THE ANTENNA WIRE.**



Step 5: WI-FI MOD ONLY: Insert the cover threads through the exposed hole. Secure module using supplied metal nut.



Step 6: Reconnect communication cable. Close facepack, and ensure it locks into place.

Setup

There are two ways to associate a controller with a Wi-Fi network: through a networked Wi-Fi router or directly to a wireless iOS or Android device.

Connecting to an Existing Network (Wi-Fi Module)

To connect a controller to an existing Wi-Fi network, follow the steps below. Please ensure the Wi-Fi module is already installed per the instructions in the installation section.

1. From the Home screen, navigate to the Setup screen using the scroll wheel.



2. Scroll to and select Wi-Fi.



Note

The menu option changes depending on the preferred wireless connection. The LAN menu is the default option. Wi-Fi will appear if the WIFIMOD2 is plugged into the facepack.

Wi-Fi Setup

3. Scroll to Network field and press scroll wheel to choose a specific network.

The screenshot shows the 'Wi-Fi Setup' interface. At the top, it says 'Wi-Fi: Direct Connect Ready'. Below this, there is a 'Network' field with 'lxtwo' selected. To the right of the network field are three orange buttons: 'Static IP', 'Lutron', and 'Test'. Below the network field, there is a 'Static' checkbox which is currently unchecked. At the bottom, the following information is displayed: IP Address: 10.68.16.181, MAC Address: 28:18:78:bb:d1:97, and Serial #: 0000000000.



Note

The controller defaults to “Direct Connect” mode.

4. The Wi-Fi Networks page auto-populates with the SSIDs of local wireless networks within range of the controller. The security column displays “Y” or “N” (yes or no) if a password is required to connect to that network. The RSSI column displays a numeric value to indicate the signal strength of each network. RSSI is measured between zero and 120, with optimum performance above 70.

The screenshot shows the 'Wi-Fi Networks' interface. At the top, there are two orange buttons: 'Direct Connect' and 'Other Network'. Below these buttons is a table with the following data:

Available Networks	Security	Rssi
Network 1	Y	108
Network 6	N	7
Network 5	N	6

- If a “Y” was displayed for the selected network, a password entry screen will appear. Select each box to scroll for the desired character and press the scroll wheel to finalize that character. Move to the next character space and repeat the process until the full password is entered.



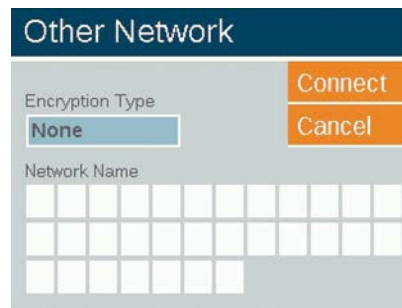
- Select “OK.”
- The controller will then connect to the network.



Note

Connection can take up to 20 seconds.

- If the network SSID does not appear in the list of available networks, but the network is close enough that it should be able to connect, select the “Other Network” button from the Wi-Fi networks page.



- Enter the SSID of the desired network.
- Select the appropriate password button and enter the password accordingly as shown previously. Hint: WPA is the most common in modern networks.



Note

For best results, ensure an RSSI of 70+.

Connecting to an Existing Network (LAN)

A direct connection between the controller and the network equipment can provide a more reliable connection. A LAN adapter is pre-installed into the Luxor controller. Insert ethernet cable into LAN port to begin LAN connection process.

1. From the Home screen, navigate to the Setup screen using the scroll wheel.
2. Scroll to and select LAN.



Note

This menu option changes depending on which network connection is being used. “Wi-Fi” displays only when the Wi-Fi module is connected into the accessory port. If no Wi-Fi is present, LAN will appear by default.

- The LAN status screen will display as “Connected” when a Cat 6 connection is made between the LAN module and the network device.

The screenshot shows the LAN Setup interface. At the top, there is a dark blue header with the text "LAN Setup". Below this, the status "LAN: Connected" is displayed in a light grey box. To the right of the status are three orange buttons: "Static IP", "Lutron", and "Test". Below the status box, the following information is listed: "IP Address: 10.68.16.181" with a small white square and the word "Static" to its right; "MAC Address: 28:18:78:bb:d1:97"; and "Serial #: 3847204723".

Direct Connect

The controller can be placed in direct connect mode, allowing an iOS or Android device to connect directly over Wi-Fi to a single controller. This removes the need to go through the Wi-Fi router or network in order to communicate directly with the controller.

1. From the Home screen, navigate to the Setup screen using the scroll wheel.



2. Scroll to and select Wi-Fi.



Note

This menu option only appears if Wi-Fi module is installed.

- The controller defaults to Direct Connect mode. The network name is LXTWO.

Wi-Fi Setup

Wi-Fi:
Direct Connect Ready

Network
lxtwo

Static IP
Lutron
Test

IP Address: 10.68.16.181 Static
MAC Address: 28:18:78:bb:d1:97
Serial #: 0000000000

- If a controller is in Network mode, select the "Network" button on the Wi-Fi setup screen. Then select "Direct Connect" to switch to Direct Connect mode.

Wi-Fi Networks

Direct Connect
Other Network

Available Networks	Security	Rssi
Network 1	Y	108
Network 6	N	7
Network 5	N	6



Note

The Direct Connect feature is available only with the Wi-Fi module, not a LAN connection.

Multiple Controllers

When multiple controllers on a single site are connected to the same network via LAN or Wi-Fi, the app sees the controllers as a single system with up to 250 groups available across all controllers. Each controller will retain and automate its own programs, but when initiating a manual group event or theme through the smartphone app, the controllers will act as one.

1. To set up multiple controllers on a single site, start by entering the same Wi-Fi network information on each controller that will be linked. Refer to pages 8 or 11 for detailed instructions.
2. When manually initiating a group from the smartphone app, every controller will activate and every fixture assigned to that group will initiate, no matter which controller the fixture is connected to.
3. Group/theme names and theme settings are saved across all linked controllers and will remain in sync as long as each Luxor remains connected to the network. Note: The facepack displays only the group numbers and theme letters; names assigned by the user are displayed only through the app.

Wi-Fi Tips

The Wi-Fi operates optimally at an RSSI of 70 or greater. If the RSSI indicates a value lower than 70, consider the following alternatives:

- Add an extender or access point to the local network, boosting signal closer.
- Move into an area with less interference.
- Consider switching to the LAN module for a Cat 6 connection in areas of poor signal strength.

If the Wi-Fi signal is not as strong as you think it should be, consider possible sources of interference. This can include the following:

- Neighbors' Wi-Fi networks
- Household electronics such as cordless phones, baby monitors, or microwaves
- Physical interference such as drywall, brick, or stucco

Troubleshooting

PROBLEM	CAUSE	RESOLUTION
Network not listed on available networks	Controller not seeing network	Reset network router and verify Wi-Fi signal at transformer's location
App will not connect to controller	Device, controller, or both are not on the wireless network	Check that device is connected to the correct network
Controller falls off network	Low Wi-Fi signal strength at controller	Elevate the network router for a better signal or add a Wi-Fi booster to increase signal at the controller
LAM will not assign a fixture	Low Wi-Fi signal strength near the fixtures	Elevate the network router for a better signal or add a Wi-Fi booster to increase signal at the controller
Fixtures operate correctly from the controller, but not from the app at controller	Low Wi-Fi signal strength Elevate the network router for a better signal or add a Wi-Fi booster to increase signal at the controller	
A fixture will not turn on from app, but will under "All Lights On"	Fixture may be grouped incorrectly	Using the LAM device or by returning the fixture to the transformer, group the fixture to the appropriate group

Regulatory and Legal Information

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 or more 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.

The user is cautioned that changes/modifications not approved by the responsible party could void the user's authority to operate the equipment.

To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation

at a closer distance is not recommended. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be chosen so that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

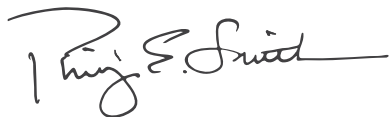
Wi-Fi Legal Information

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

This radio transmitter (IC: 7693A-24WG0MAMB) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

FXLuminaire

A Hunter Industries Company Our mission is to create the most energy-efficient lighting products in the world while maintaining the highest level of quality and reliability. In every instance we will back our innovations with the unwavering support our customers need to succeed.



Gene Smith, President, Landscape Irrigation and Outdoor Lighting

Need more helpful information on your product? Find tips on installation, controller programming, and more.



fxl.com/support
lumandscape.com/contact



FX 760-591-7383
Lumandscape 650-595-5862/+617 3854 5000

HUNTER INDUSTRIES INCORPORATED | *Built on Innovation*®

1940 Diamond Street, San Marcos, California 92078, USA

www.hunterindustries.com