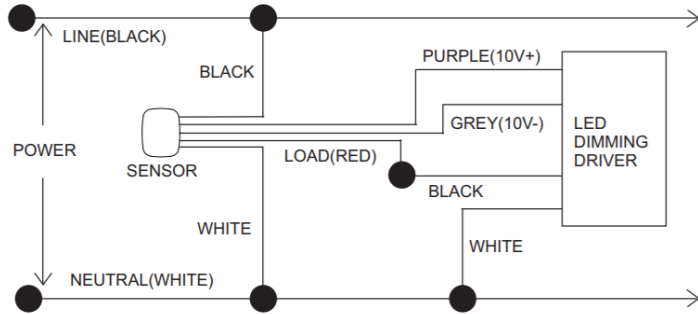# ILLUMRA Bluetooth Mesh Motion / Light Fixture Sensor

⚠️ **WARNING: May result in serious injury or death. Turn off power at circuit breaker before installing the unit.**

Wiring Diagram

Ⓐ - Install the Bluetooth Fixture Controller

1. For Professional Installation Only.
2. Disconnect power at the circuit breaker before installation.
3. Confirm the light fixture is 0-10V dimming compatible. Phase dimming is not supported.
4. Connect wires following the wiring diagram below.
5. Reconnect power at the breaker.

Ⓑ - Install the ILLUMRA Mobile App

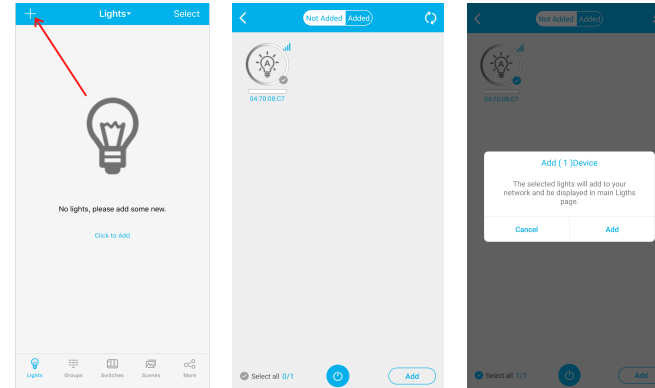Search "ILLUMRA - BT Lighting Manager" in the Google Play or iOS App Store.

Ⓒ - Setup Fixture Sensors with a mobile phone

The setup process should be completed using only one smartphone. Connecting with more than one phone during setup may cause unexpected results.
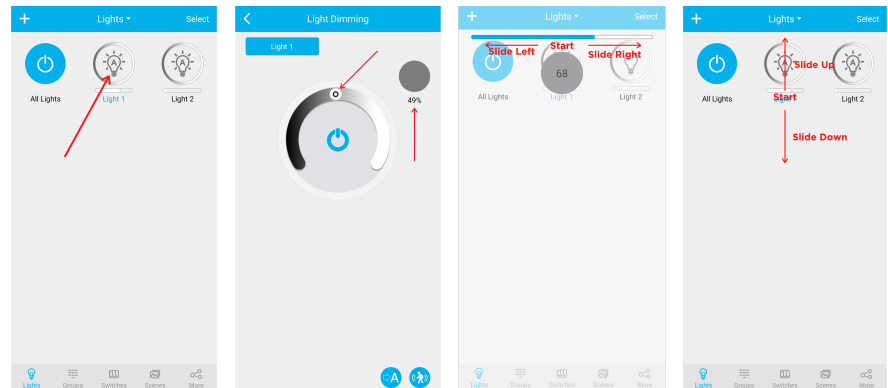
Ⓒ❶ - Add a New Light

1. Tap (+) in the upper left corner to discover nearby lights.
2. Nearby lights that have been discovered but not added are shown on the "Not Added" list.
3. Tap "Add" to include the new lights in the project. Newly added lights will blink to indicate a successful operation.

Tap "Return" to go back to the Lights page.

Ⓒ❷ - Control Lights & Change Options

1. **Toggle:** Quick tap a light's icon on the Lights page to toggle the light On and Off.
2. **Quick Dimming**: Swipe left-right or up-down on the light's icon to dim or change color temperature.
3. **Settings:** Long press a light's icon to open the dimming control and settings page.

SPECIFICATIONS

Electrical
Power Input: 100-277 VAC 50 or 60 Hz
Standby power: <0.5W
Max Power use: <0.8W

Outputs
1 - 20A Latching Form A Relay
1 - 0-10V output, 100mA sink / 1mA src

Inputs
1 - Bluetooth Mesh (2.4 GHz)

Maximum Load
General Duty: 20A
Tungsten (Incand.): 20A
Fluorescent Ballast: 20A
Range: 50-150 feet (typical)

Mounting: Outside of junction box w/ threads
Dimensions: 2.11 x 1.73 x 1.09 inches
                      (54 x 44 x 28 mm)
Operating Specifications
Operating Temp: -40 to ~115 ºF (-40 to +45ºC)
Humidity: 10-90% non-condensing
Power up state: On
Link Capacity: 25 links
User settable "Prefered Level"

Certifications
ETL: UL 60730 (U.S.), CSAc22.2#14-05 (Canada), UL 2043 (Plenum)
CE: IEC 60730, IEC61000-4-5 (Surge)
FCC: 2ARWE01BLUSE01
IC: ?

©❸ - PIR & Daylight Sensor Settings

Sensor settings: Configure sensor options by tapping the icon at the bottom right corner of the screen.

Sensitivity: A higher sensitivity number detects motion at longer distances and wider range.

1st Delay Time: Wait time with no motion before adjusting lights to the Dim Level.

Dim Level: After the 1st time delay has expired, the light will dim to this level.
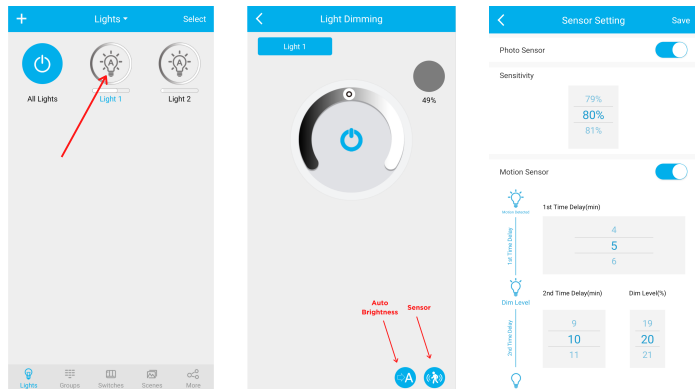
2nd Delay Time: Additional wait time with no motion before turning off the light.

Auto-Brightness: Daylight harvesting setpoint or High End Trim. Adjust Light to preferred level and tap this icon.

Daylight Harvesting: Enable Daylight harvesting in Sensor Settings (enabled by default) then adjust the light level to desired level and press →**A** to save the target light level.

High-End-Trim: Disable Daylight Harvesting in Sensor Settings (enabled by default). Exit Sensor Settings, adjust light level and press →**A** to save auto level. This level will be recalled when motion is detected or when the Eco button is pressed on a wireless switch. For a group, enable the "Link" option set the "Linkage" level to send to all other fixtures in the group when one sensor detects motion
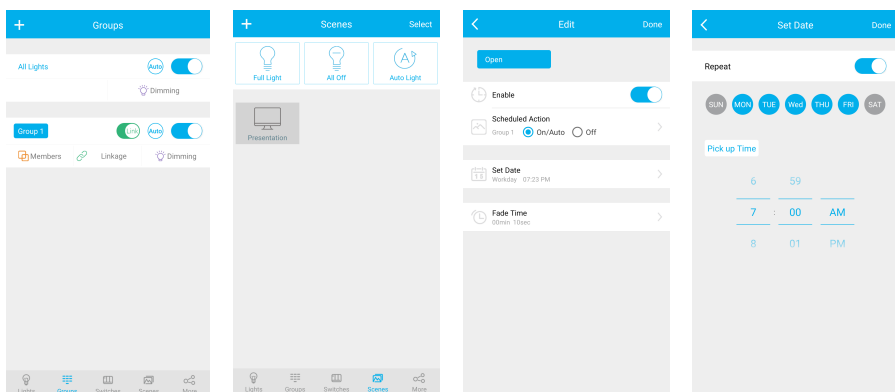

Ⓓ - Groups, Linkage, Scenes and Timer Function.

Groups: Group lights to configure and control the entire group at the same time.

Linkage: In a group, when one fixture senses motion, other fixtures in the group will turn on to the "Linkage" level if "Link" is enabled. Set the preferred brightness and save.

Scenes: Prior to accessing scene settings, adjust individual lights or groups to a preset level, then access scene settings and choose which lights will participate in the scene. Tap the Scene button to restore the levels saved in the scene. Press and hold the Scene button to edit. Up to 3 scenes may be accessed from a Wireless Wall Switch. Example: Presentation scene with lights off near the projection screen and the rest of the lights dim.

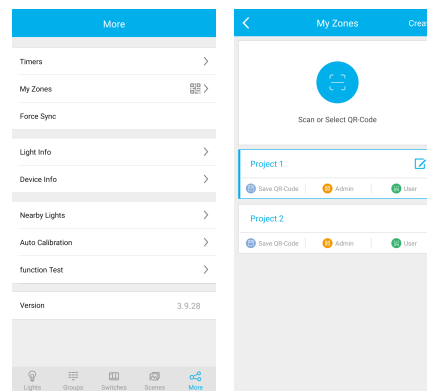**Timers:** Create actions to operate individual lights, groups or scenes on a schedule.

Ⓔ - Save Settings and Share with Others

My Zones and QR-Codes allow secure sharing of "User" or "Admin" access to the lighting system.

All Project settings can be shared between multiple smartphones by sharing QR Codes. The system allows multiple smartphones with "User" access to control the lights simultaneously. Only one "Admin" user should access the system at one time.

Create new Projects (My Zones) with a new QR Code for each location or building. The same QR Code or My Zones should not be used in more than one location or building.

1. IMPORTANT: Save a screenshot of the projects "Admin" QR Code and email it to those who may need to change system configurations in the future. Scanning the "Admin" QR Code allows full access to the system from any smartphone. Losing the "Admin" QR Code will require a system reset to make changes.
2. Share the "Admin" QR Code with others to allow them to add, delete, or edit lights and configurations.
3. Share the "User" QR Code to allow others to control the lights with no access to add, delete or edit.

Ⓕ - Reset Lights

Reset lights that are not discoverable or are unresponsive. Lights will become unresponsive and will not respond to discovery if they were added to a project with a different QR Code or the QR Code used to configure them is no longer available.

Resetting lights deletes all the configuration and restores factory default settings.

Avoid having to reset lights by deleting them from a project on the mobile app while they are online. When lights are deleted using the app, they will be restored to factory settings and the configuration erased so they will be ready to add to a new project (My Zones).

Reset a light manually by powering on and off the light six times in a specific pattern. See steps below:
1. Power OFF and wait for 10 seconds or more.
2. Power ON and then power OFF immediately after the light turns on, leave off for 10 seconds.
3. Power ON and then power OFF immediately after the light turns on, leave off for 10 seconds.
4. Power ON and then power OFF immediately after the light turns on, leave off for 10 seconds.
5. Power ON and wait for 8 seconds, then power OFF and wait for 10 seconds.
6. Power ON and wait for 8 seconds, then power OFF and wait for 10 seconds.
7. Power ON and the light will blink 3 times to indicate it has been reset. Lights that have been successfully reset will be restored to factory settings, all settings will be erased, and they are open for discovery.

Explore additional functionality like setting up different lighting groups and scenes, switches and timers on the mobile app.