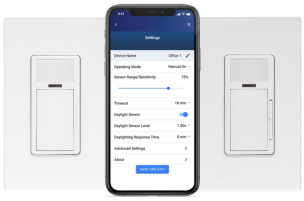


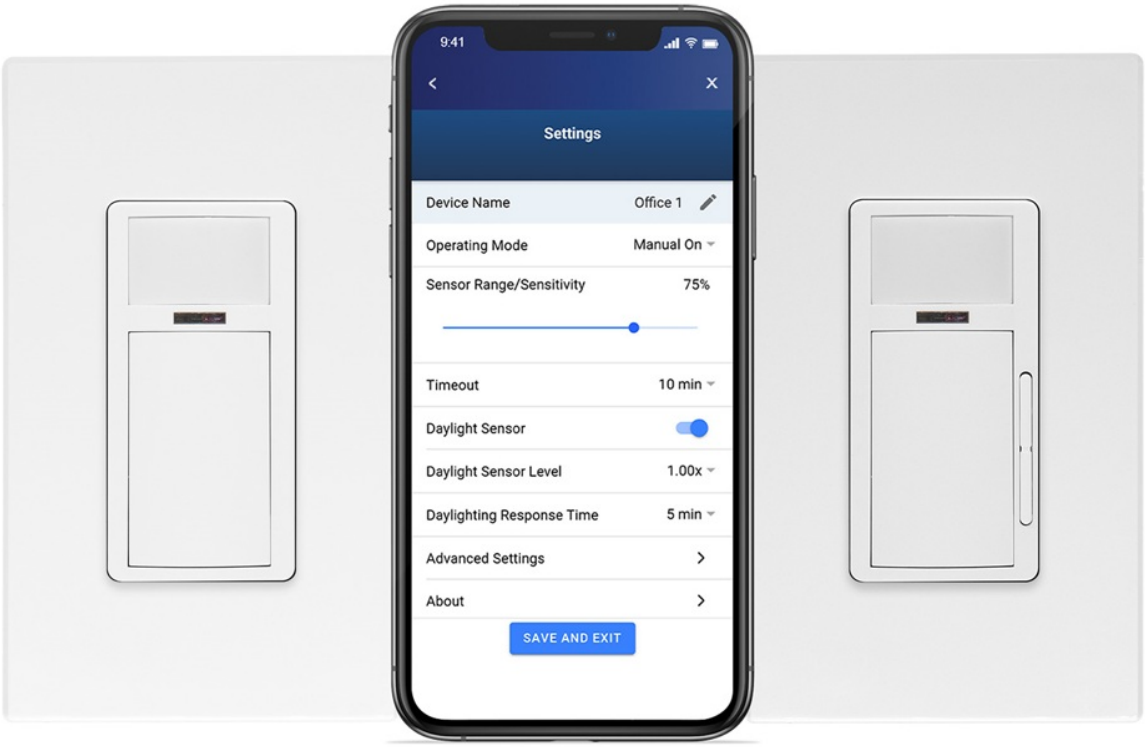
# LEVITON Smart Sensor App User Guide



Contents



## LEVITON Smart Sensor App




## Product Information

The Smart Fixture Mount Sensors are a set of smart sensors designed for use with the Smart Sensor App. These sensors come with various firmware levels that offer different features and updates.
The initial release (1.0) provides basic functionality, while subsequent updates (1.3 and 1.4) introduce grouping capabilities and scheduling options for specific models.

The product also allows for product configuration, including setting up passcodes for individual sensors. Passcode protection ensures additional security for your sensors. Scanning helpful hints are provided to disable the Occ sensor for daylighting applications. When initially connected, the sensor undergoes daylight calibration for 24 hours.

The sensor can be configured as either an open or closed loop based on the application. Closed loop configuration is commonly used. The sensor also allows adjustments for the amount of ambient light required for daylighting, as well as response time to changing light conditions.

Groups can be created to manage multiple sensors together. Additional sensors can be added to pre-existing groups, and groups can also be removed. Scheduling functionality is available to create schedules and behaviors for groups of sensors.
Contact information for Leviton Manufacturing Co., Inc., including their lighting and controls division and global headquarters, is provided.

## Product Usage Instructions

1. To set up a passcode for a sensor, tap “Setting Up a Passcode for a Sensor” even if it’s your first time setting up a passcode.
2. To enter a passcode for a sensor with passcode protection, follow the instructions provided in the user manual.
3. If you want to disable the Occ sensor for daylighting applications only, refer to the scanning helpful hints section.
4. When initially connecting the sensor, allow it to undergo daylight calibration for 24 hours.
5. Configure the sensor as either an open or closed loop based on the application. Closed loop configuration is

recommended.

6. To create a group, follow the instructions provided in the user manual.
7. To add additional sensors to a pre-existing group, refer to the user manual for detailed steps.
8. If you wish to remove a group, follow the instructions provided in the user manual.
9. To create schedules and behaviors for a group of sensors, refer to the scheduling overview section and follow the instructions provided.

For further assistance with the product, you can contact Leviton Manufacturing Co., Inc. through their provided contact information or visit their website at www.leviton.com/integratedcontrols.

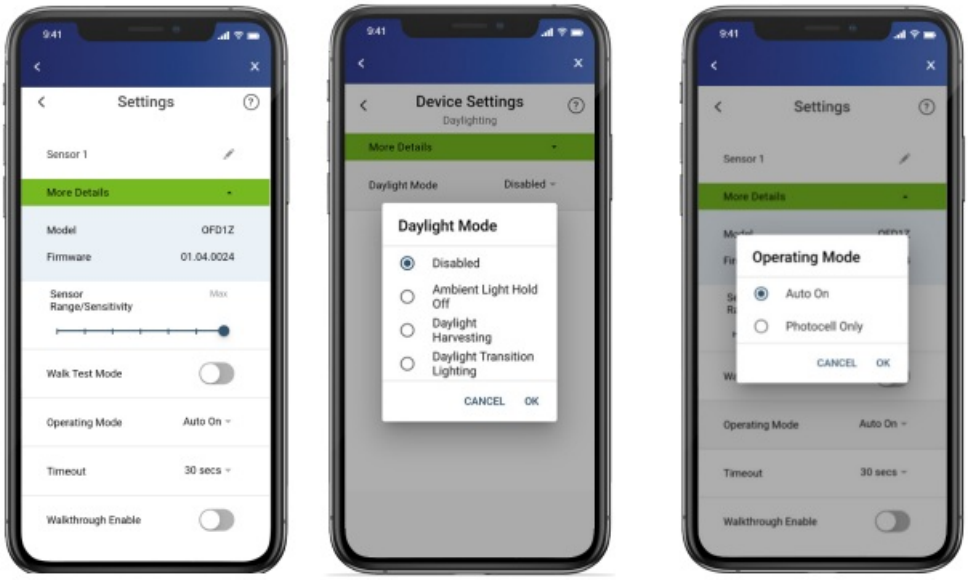
## Smart Sensor App

Fixture Mount Sensors are shipped ready to operate in the following default mode:

- Auto-ON
- 20-minute timeout
- Daylight Harvesting
- No adjustments or app required to operate in this mode
- Sensors will automatically start daylight calibration and remain ON for 24 hours
- Sensors will be fully calibrated after 24 hours and begin operating in default modes

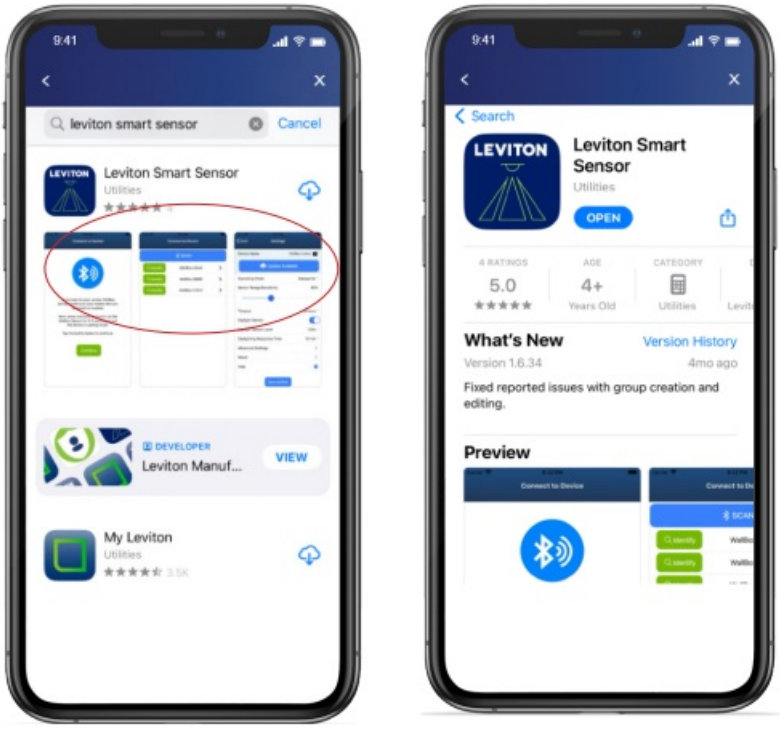
### Smart Sensor App Overview

- Easy-to-use
- Intuitive
- Advanced occupancy and daylighting options
- Templates
- Options for grouping & scheduling
- Over-the-Air (OTA) updates allows for new features, easy updates




### Download Smart Sensor App

- Download the Leviton Smart Sensor App from Google Play Store or Apple App Store on a phone or tablet
- Connects to sensor via Bluetooth

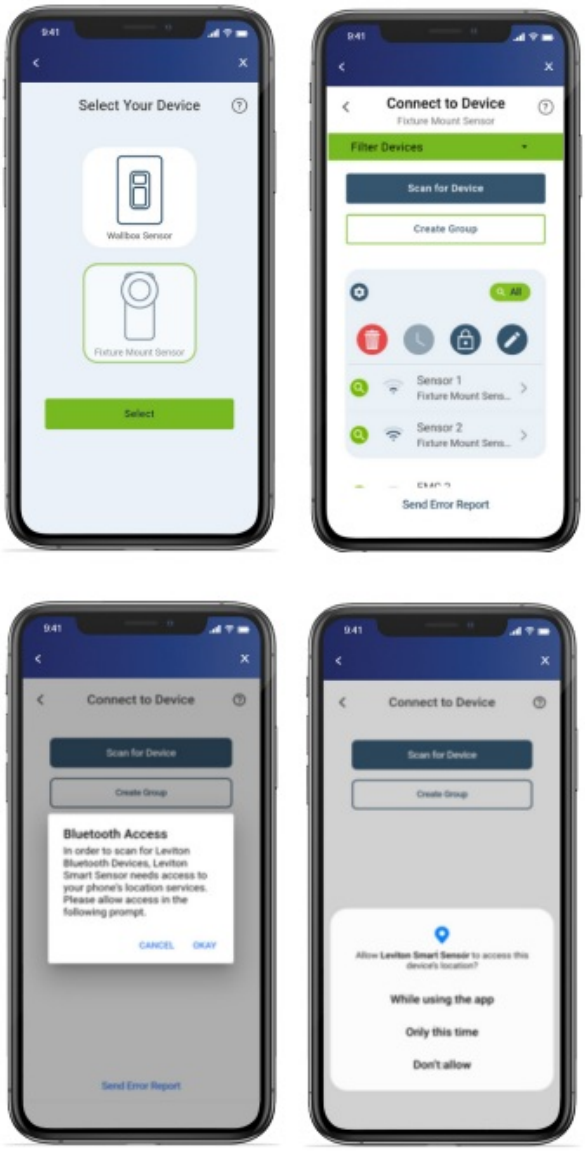



**Smart Sensor App Overview**

- Sensor default settings:
- Auto-ON, 20-min timeout, Daylight Harvesting
- No configuration needed if using these settings
- Smart Sensor App required for any changes to product configuration
- App is used for several Smart Sensor products
- Need to select Fixture Mount Sensor
- (?) Provides contextual help
- Helpful hints
- Available on each page in app
- No need to put sensors in pairing mode; always available to connect using App
- Note: App connects to each sensor and retrieves the settings from the sensor. Settings are stored in the sensor not in the phone.

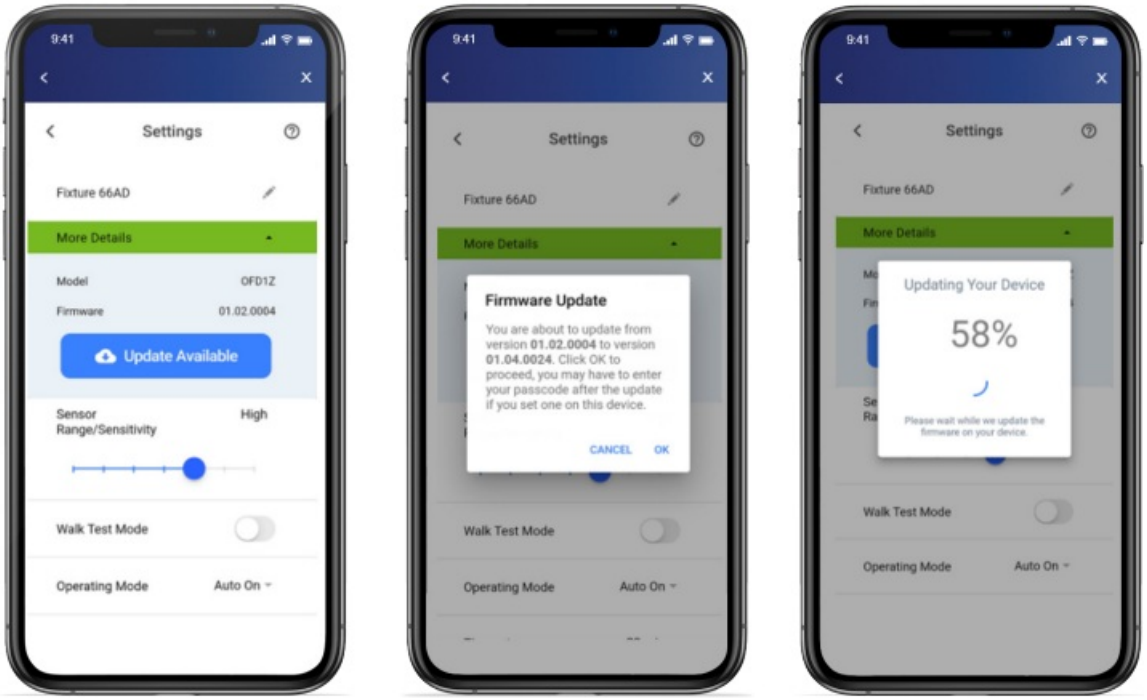
**Product Configuration – Notes**

- For first time connections (if prompted):
- Click OKAY for Bluetooth Access
- Allow Leviton Smart Sensor to access device location by click on either “While using the app” or “Only this time”




**Firmware Updates**

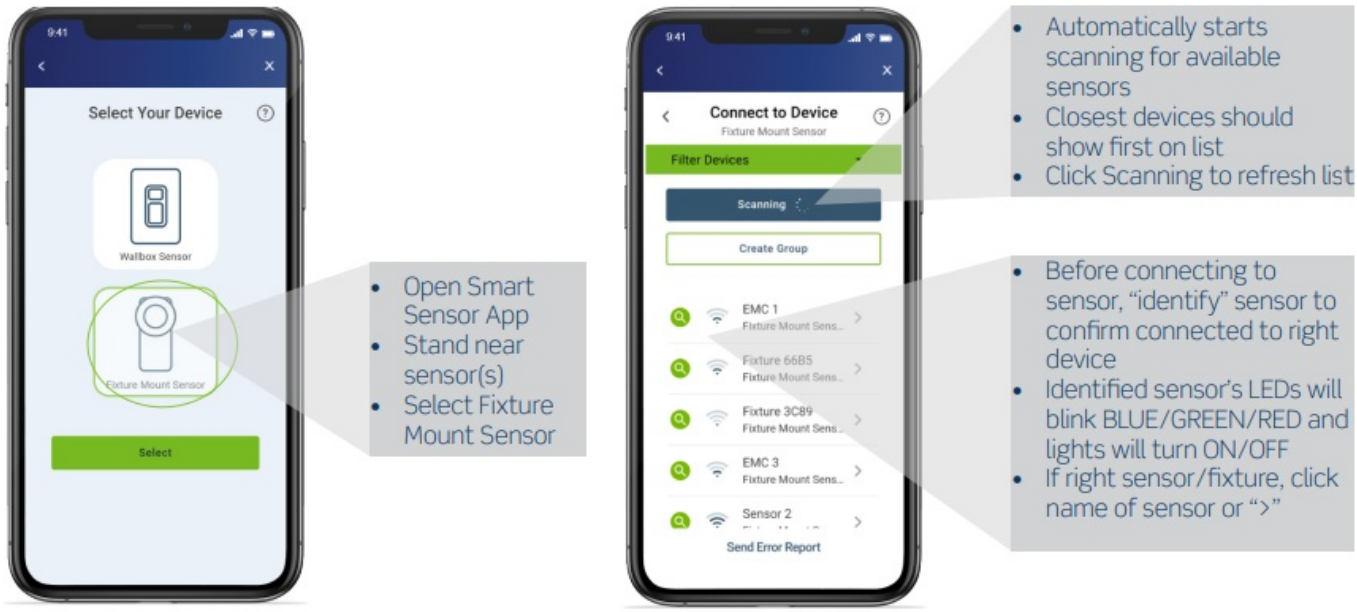
- Check “More Details” on main settings page to see current Model/Firmware details and whether any updates are available
- Clicking “Update Available” will update sensor to latest firmware level
- Updates take 1-2 mins
- Note: updates not required unless needed for latest feature set




| Firmware Level | Features | Notes |
|---|---|---|
| 1.0 | Initial Release | — |
| 1.3 | Grouping/ Misc Updates | Allows for<br><br>grouping up to 16 sensors; misc. updates |
| 1.4 | Scheduling | For OFDUZ and ZLUDZ models only |

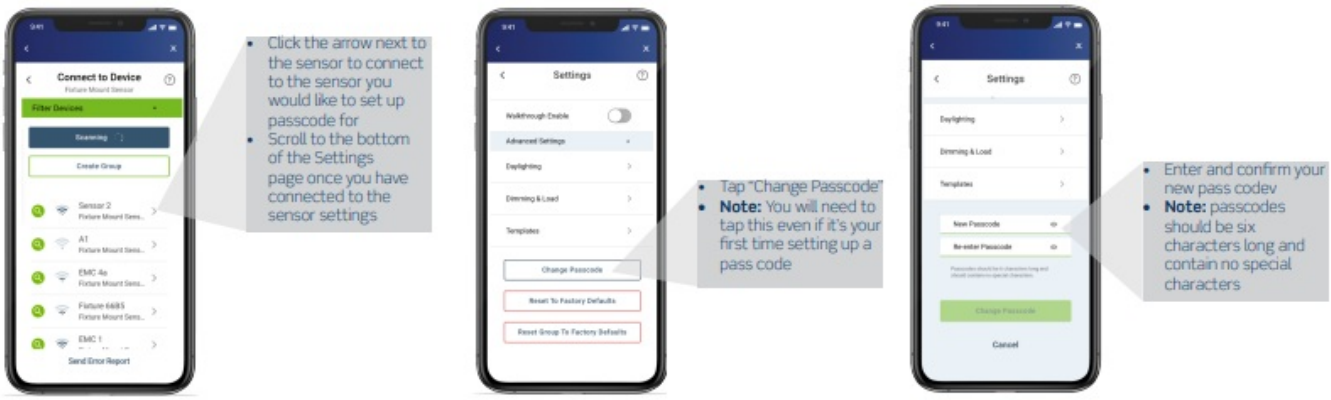
- Most inventory currently at 1.3
- If UPDATE AVAILABLE shows, updating firmware will update to latest level (1.4)
- Note: Updates not required unless needed for latest feature set

### Product Configuration



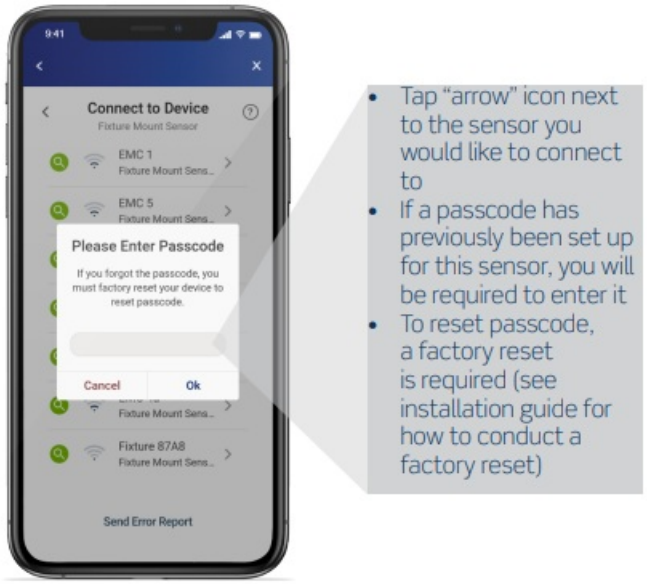

- Open Smart Sensor App
- Stand near sensor(s)
- Select Fixture Mount Sensor
- Automatically starts scanning for available sensors
- Closest devices should show first on list
- Click Scanning to refresh list
- Before connecting to sensor, "identify" sensor to confirm connected to right device
- Identified sensor's LEDs will blink BLUE/GREEN/RED and lights will turn ON/OFF
- If right sensor/fixture, click name of sensor or ">"

**Setting Up a Passcode for a Sensor**



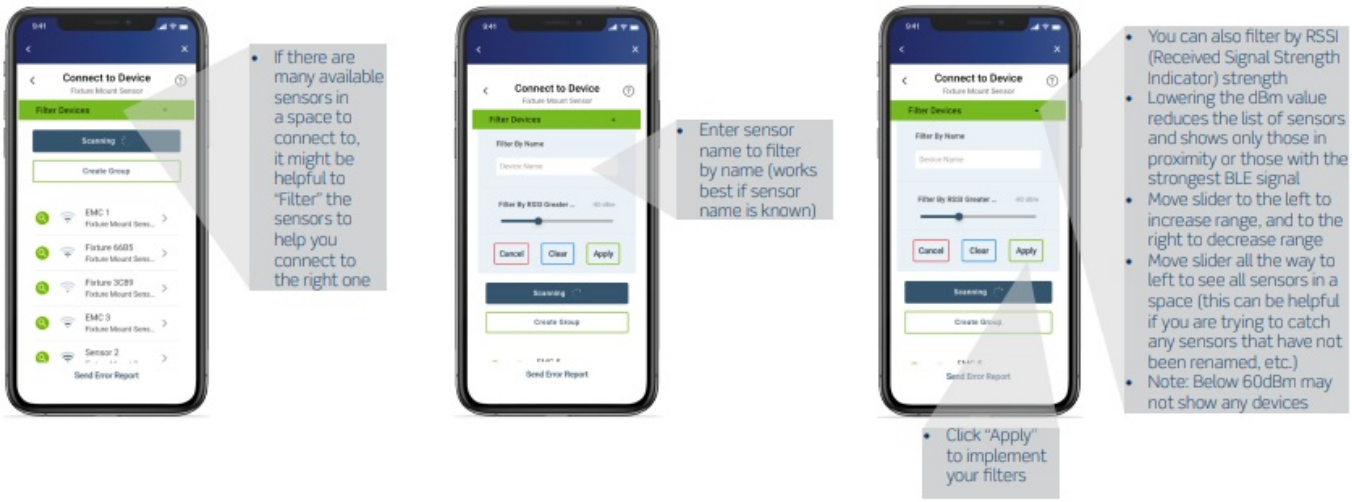

- Click the arrow next to the sensor to connect to the sensor you would like to set up passcode for
- Scroll to the bottom of the Settings page once you have connected to the sensor settings
- Tap "Change Passcode"
- Note: You will need to tap this even if it's your first time setting up a pass code• Enter and confirm your new pass code v
- Note: passcodes should be six characters long and contain no special characters

**Entering a Passcode for a Sensor with Passcode Protection**




- Tap “arrow” icon next to the sensor you would like to connect to
- If a passcode has previously been set up for this sensor, you will be required to enter it
- To reset passcode, a factory reset is required (see installation guide for how to conduct a factory reset)

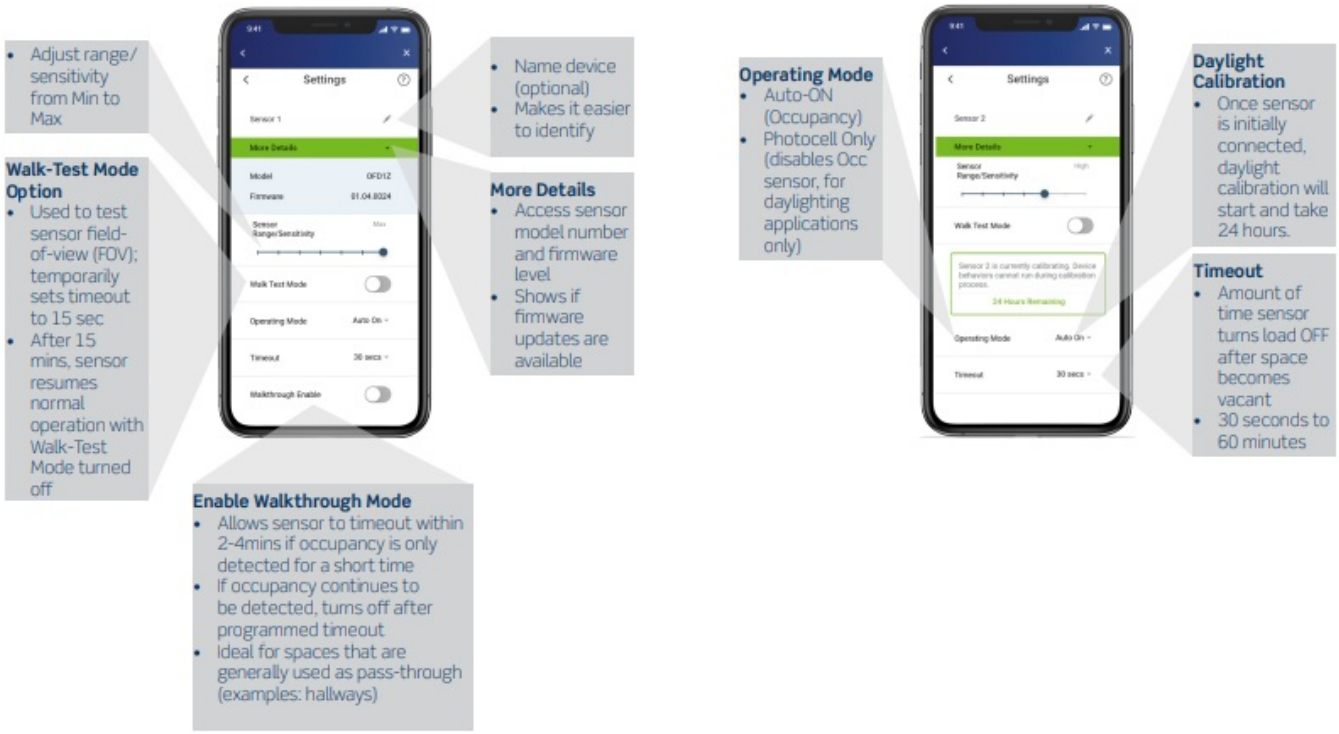
**Scanning Helpful Hints**




- If there are many available sensors in a space to connect to, it might be helpful to “Filter” the sensors to help you connect to the right one
- Enter sensor name to filter by name (works best if sensor name is known)• You can also filter by RSSI (Received Signal Strength Indicator) strength
- Lowering the dBm value reduces the list of sensors and shows only those in proximity or those with the strongest BLE signal
- Move slider to the left to increase range, and to the right to decrease range
- Move slider all the way to left to see all sensors in a space (this can be helpful if you are trying to catch any sensors that have not been renamed, etc.)
- Note: Below 60dBm may not show any devices

- Click “Apply” to implement your filters

**Sensor Configuration – Main Settings Page**




- Adjust range/sensitivity from Min to Max

**Walk-Test Mode**

- Used to test sensor field-of-view (FOV); temporarily sets timeout to 15 sec
- After 15 mins, sensor resumes normal operation with Walk-Test Mode turned off
- Name device (optional)
- Makes it easier to identify

**More Details**

- Access sensor model number and firmware level
- Shows if firmware updates are available

**Enable Walkthrough Mode**

- Allows sensor to timeout within 2- 4mins if occupancy is only detected for a short time
- If occupancy continues to be detected, turns off after programmed timeout
- Ideal for spaces that are generally used as pass-through (examples: hallways)

**Operating Mode**

- Auto-ON (Occupancy)
  Photocell Only (disables Occ sensor, for daylighting applications only)

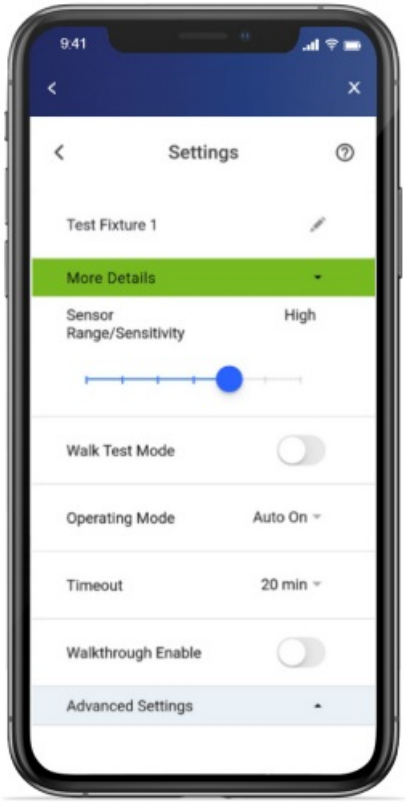
### Daylight Calibration

- Once sensor is initially connected, daylight calibration will start and take 24 hours.

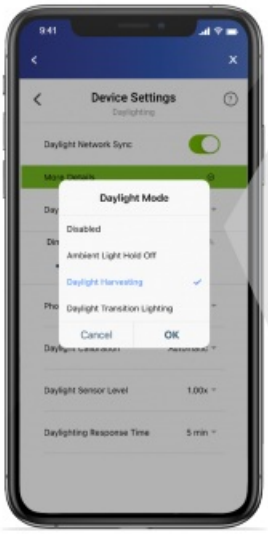
### Timeout

- Amount of time sensor turns load OFF after space becomes vacant
- 30 seconds to 60 minutes

## Sensor Configuration – Advanced Settings

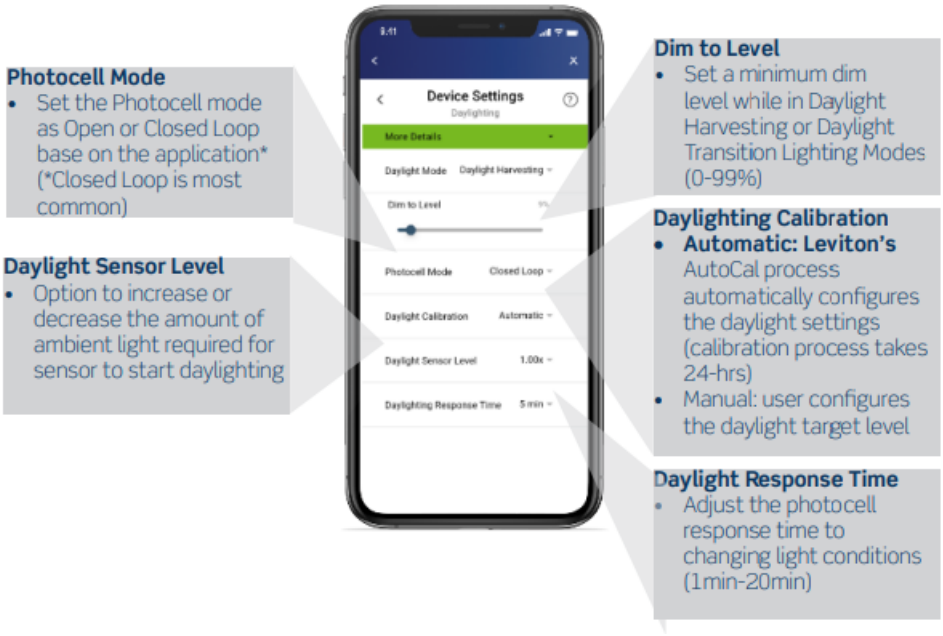



### Advanced Settings – Daylighting Options




**Daylighting Mode options:**

- **Disabled:** (OFF)
- **Ambient Light Hold-Off:** holds lights OFF when sufficient ambient light is present to meet the target level; this mode does not dim, just turns lights ON or OFF (ideal for switching-only fixtures)
- **Daylight Harvesting:** dims the light output in relation to natural ambient light contribution; more natural light = less artificial light (for 0-10V fixtures)
- **Daylight Transition Lighting:** reverse daylight harvesting; ideal for areas where light transitions from dark to light or light to dark; eases transition for eyes (safety). Ideal for parking garages, tunnels, etc.

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- Disabled: (OFF)
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**Photocell Mode**
Set the Photocell mode as Open or Closed Loop base on the application* (*Closed Loop is most common)

**Daylight Sensor Level**
Option to increase or decrease the amount of ambient light required for sensor to start daylighting

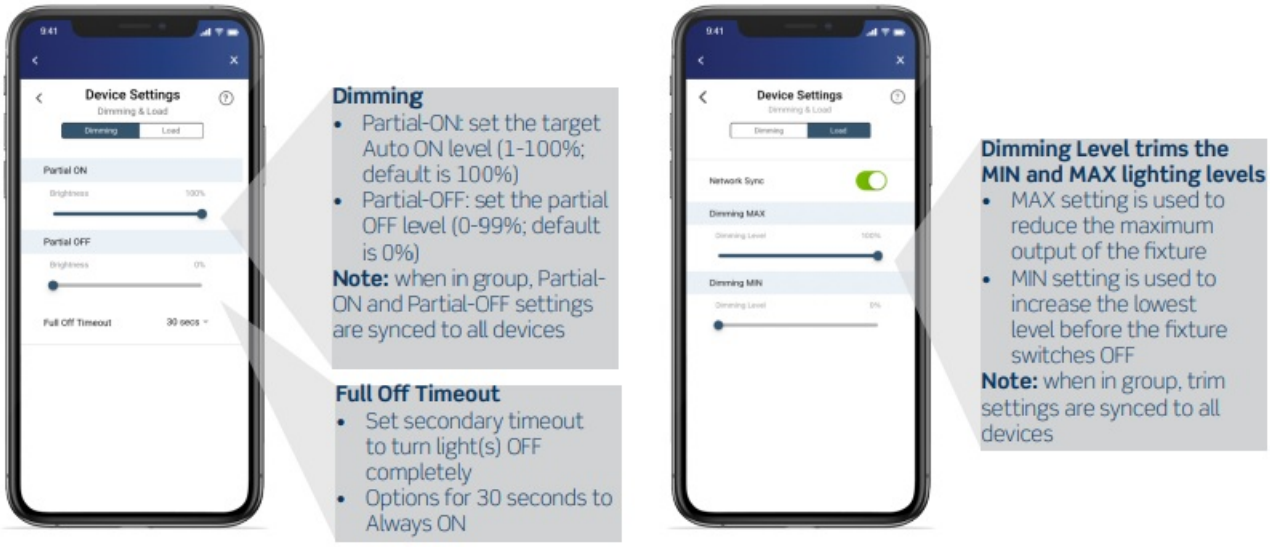
**Dim to Level**
Set a minimum dim level while in Daylight Harvesting or Daylight Transition Lighting Modes (0-99%)

**Daylighting Calibration**

- Automatic: Leviton's AutoCal process automatically configures the daylight settings (calibration process takes 24-hrs)
- Manual: user configures the daylight target level

**Daylight Response Time**
Adjust the photocell response time to changing light conditions (1min-20min)

**Advanced Settings – Dimming & Load**




**Dimming**

- Partial-ON: set the target Auto ON level (1-100%; default is 100%)
- Partial-OFF: set the partial OFF level (0-99%; default is 0%)

  **Note:** when in group, Partial- ON and Partial-OFF settings are synced to all devices

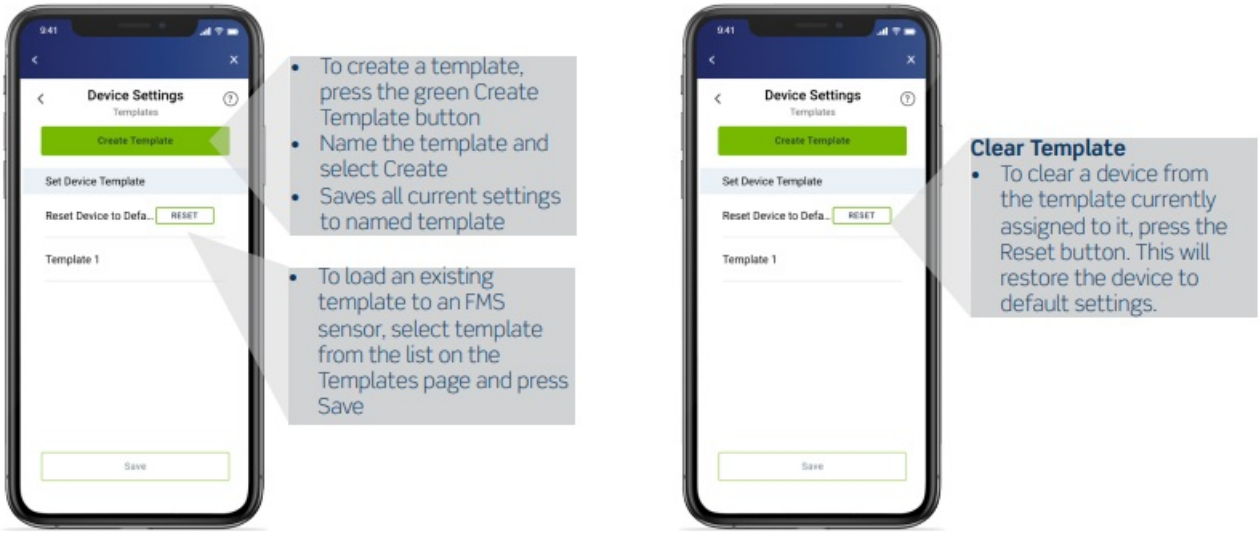
  **Full Off Timeout**
- Set secondary timeout to turn light(s) OFF completely Options for 30 seconds to Always ON

**Dimming Level trims the MIN and MAX lighting levels**

- MAX setting is used to reduce the maximum output of the fixture
- MIN setting is used to increase the lowest level before the fixture switches OFF

  **Note:** when in group, trim settings are synced to all devices

**Advanced Settings – Templates**
Templates allows user to save current device settings as a Template for future use. Note: templates are stored on the smart devices they are created on.




- To create a template, press the green Create Template button
- Name the template and select Create
- Saves all current settings to named template
- To load an existing template to an FMS sensor, select template from the list on the Templates page and press Save

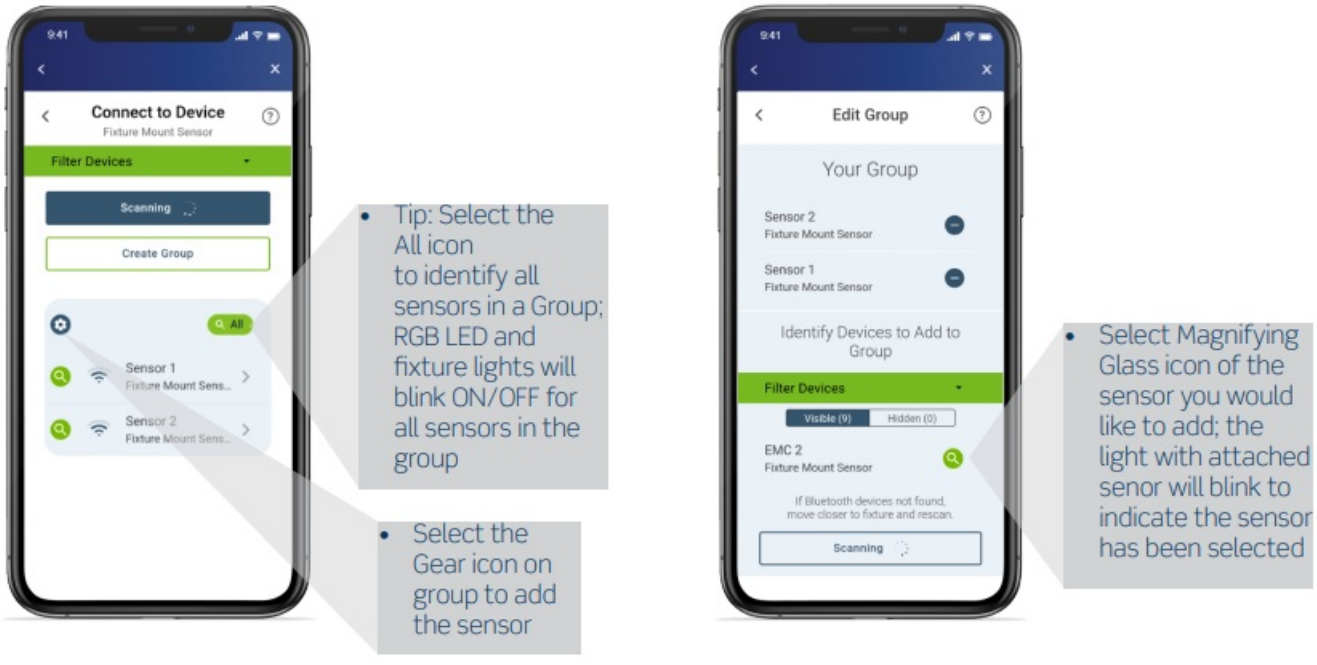
**Clear Template**
To clear a device from the template currently assigned to it, press the Reset button. This will restore the device to default settings.

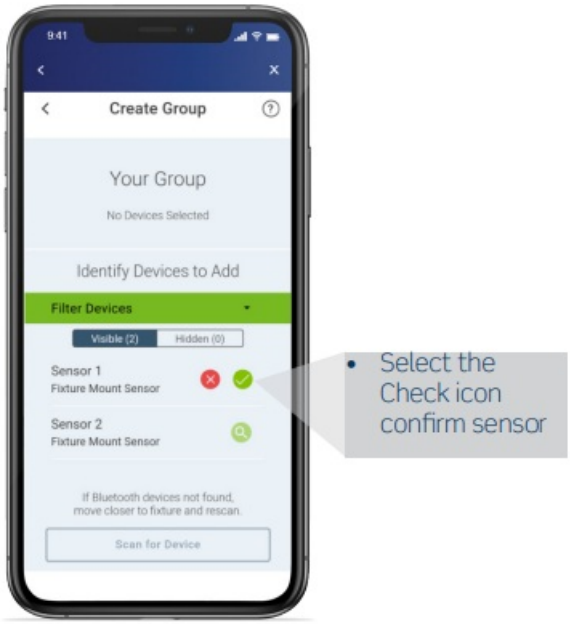
## Grouping Overview

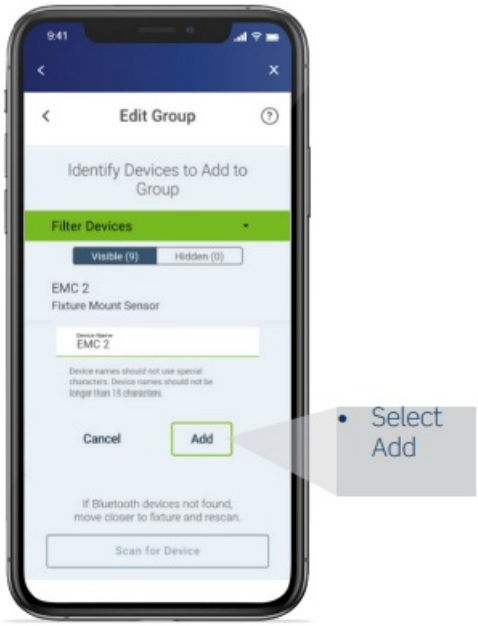
- Fixtures / Sensors to be wired and installed per installation instructions
- Up to 16 sensors can be grouped together
- Sensors are grouped together via BLE network
- Distance (end-to-end) is limited by Bluetooth signal range
- For best results:
- Determine how you want your sensors grouped (ex: per aisle or space)
- Grouping is done from the initial scan page
- Select a sensor in middle of group as the “provisioner”, and add other sensors to the group from this sensor

**Creating a Group**

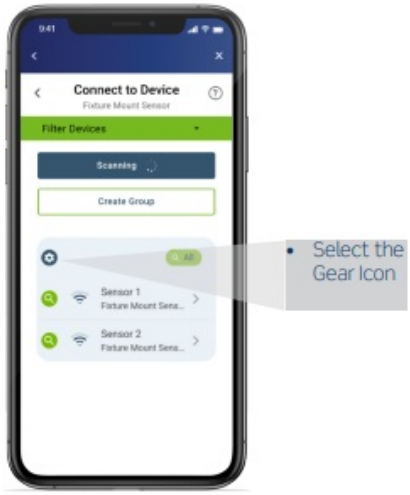

**Adding Additional Sensors to a Pre-Existing Group**

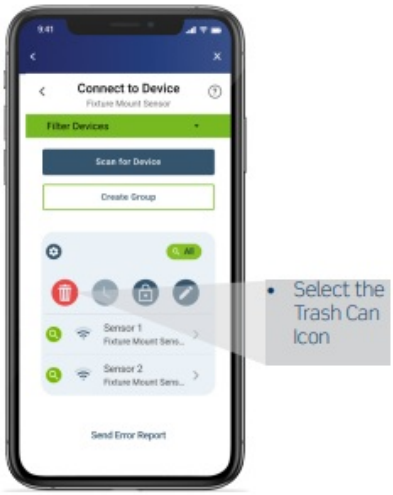


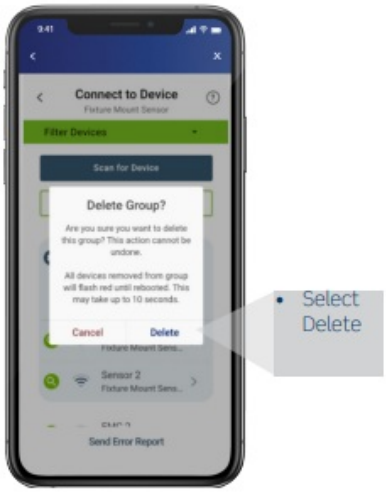



**Removing a Group**




## Scheduling Overview

- Scheduling allows sensors to behave differently based on the time of day or day of the week to maximize

energy savings

- Ability to change light level, operating mode, timeout, partial-ON & OFF, and daylight mode
- Scheduling can be done individually or shared across a group
- Only universal voltage models (ZLDUZ and OFDUZ) have the scheduling feature
- Groups of mixed product including the non-universal voltage models (ZLD1Z and OFD1Z) can support scheduling if included with groups of ZLDUZ/OFDUZs
- Note: must be connected to the ZLDUZ/OFDUZ via the Smart Sensor App to initiate the schedule feature

**Creating Schedules and Behaviors for a Group of Sensors**
Schedules and Behaviors allow you to program certain lighting control behaviors to take effect during the schedules you choose

## Operating mode options

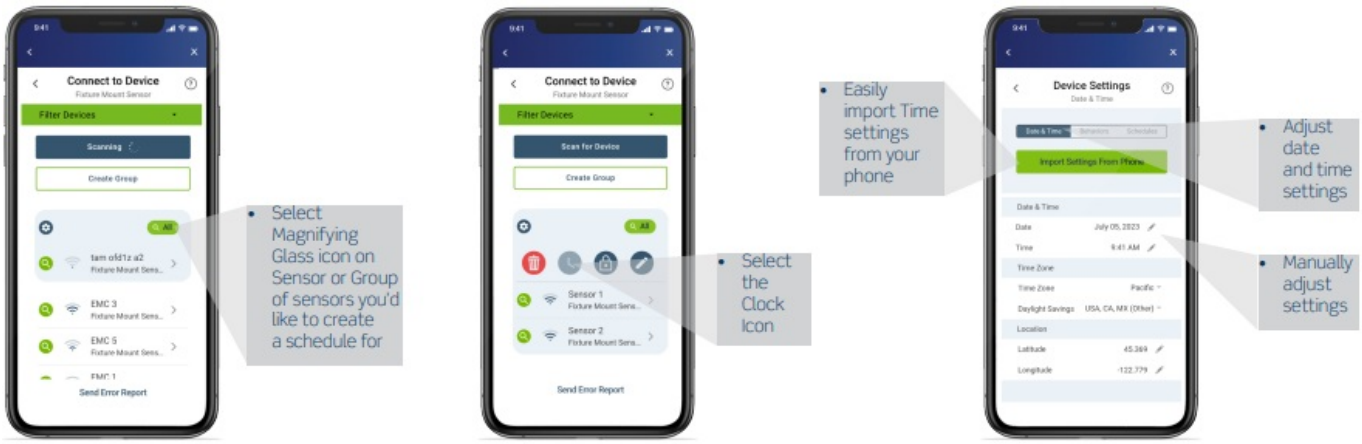
- Auto ON: Sensor automatically turns light ON with Occupancy, default is 100%; level can be adjusted
- Auto OFF: Sensor automatically turns light Lights turn off and OFF with Vacancy, default is 0%; level can be adjusted
- Photocell Only: Disables the occupancy sensor and lights ON and OFF and/or dims them UP or DOWN based on ambient lighting conditions only
- Level: Devices will be held at the specified brightness level for the duration of the schedule running this behavior

**Timeout:**

- Turns lights off to desired Auto Off level at desired time between 20 seconds and 60 minutes
- Not available in photocell only mode

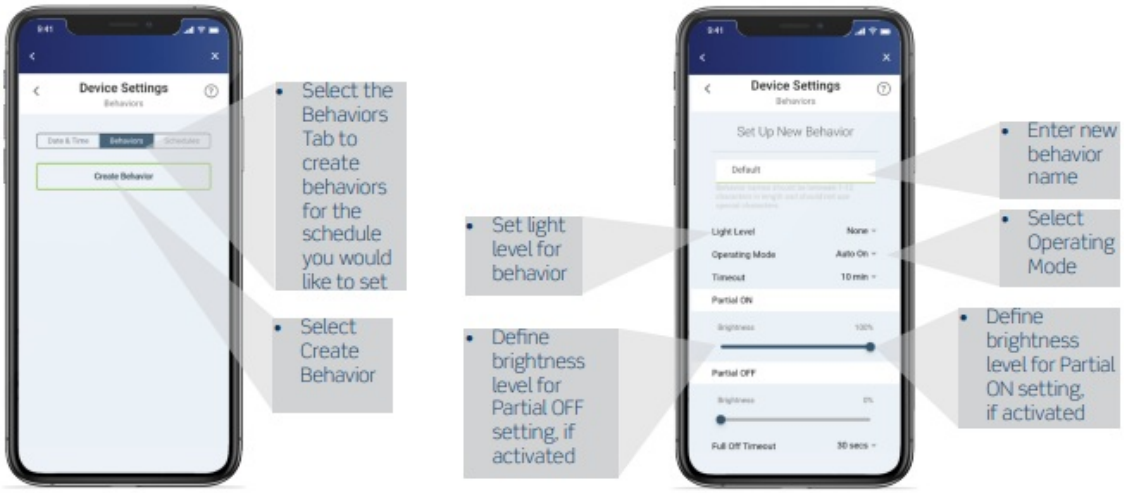
**Full Off Timeout:**
Secondary Timeout feature; turn light off fully at desired time between 20 seconds and 60 minutes

**Creating Schedules and Behaviors for a Group of Sensors**

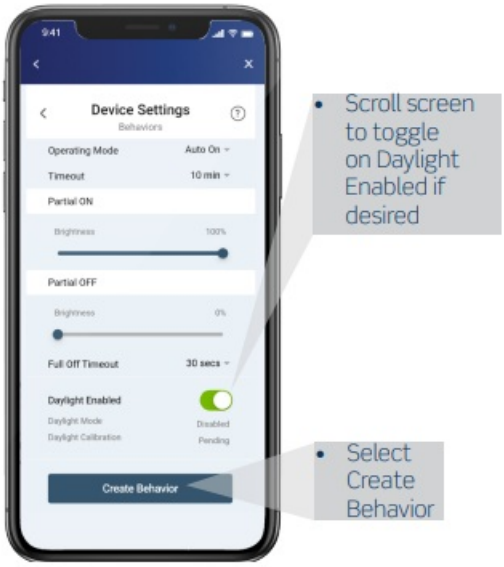



- Select Magnifying Glass icon on Sensor or Group of sensors you'd like to create a schedule for
- Select the Clock Icon

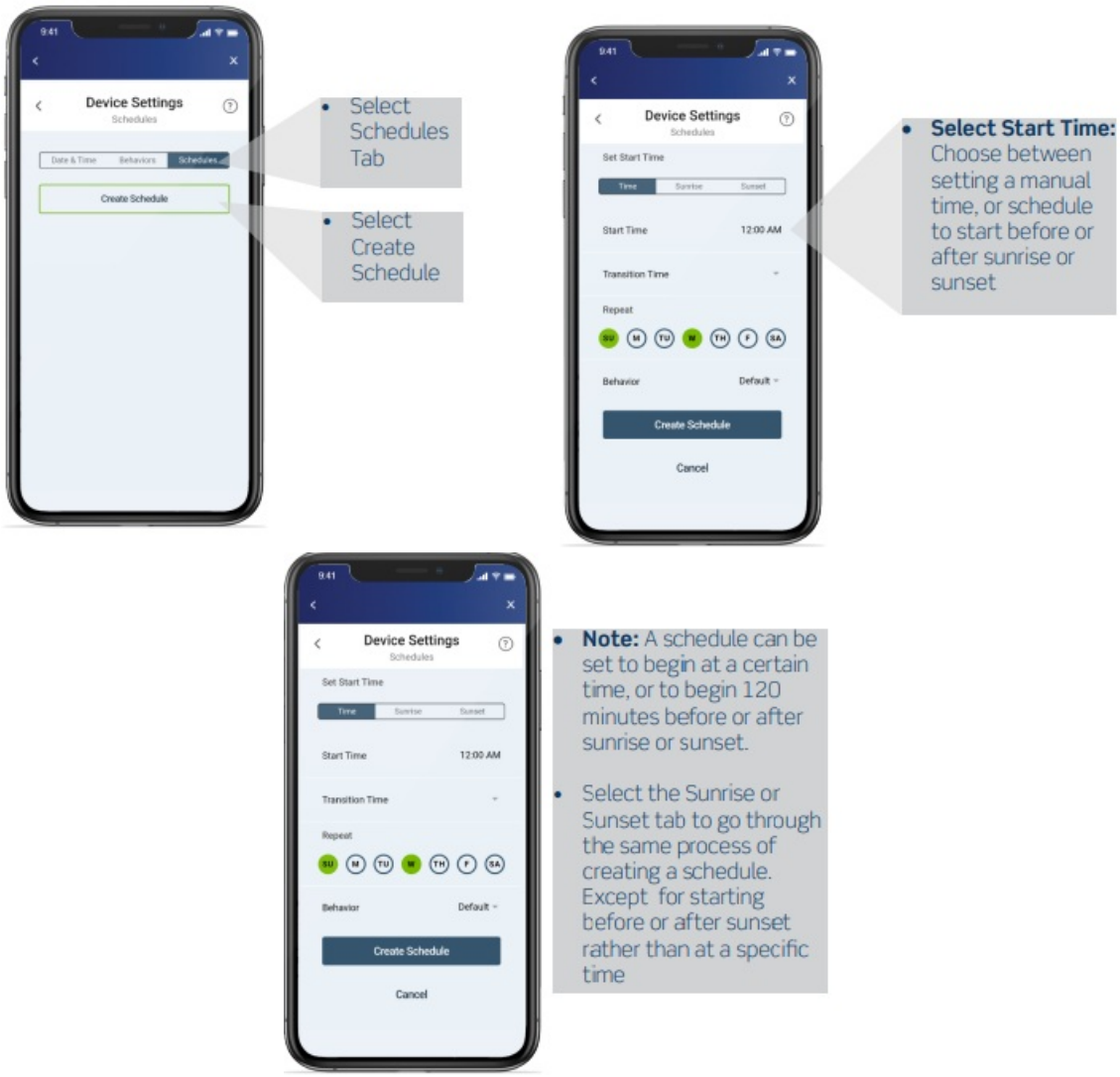
- Easily import Time settings from your phone
- Adjust date and time settings
- Manually adjust settings



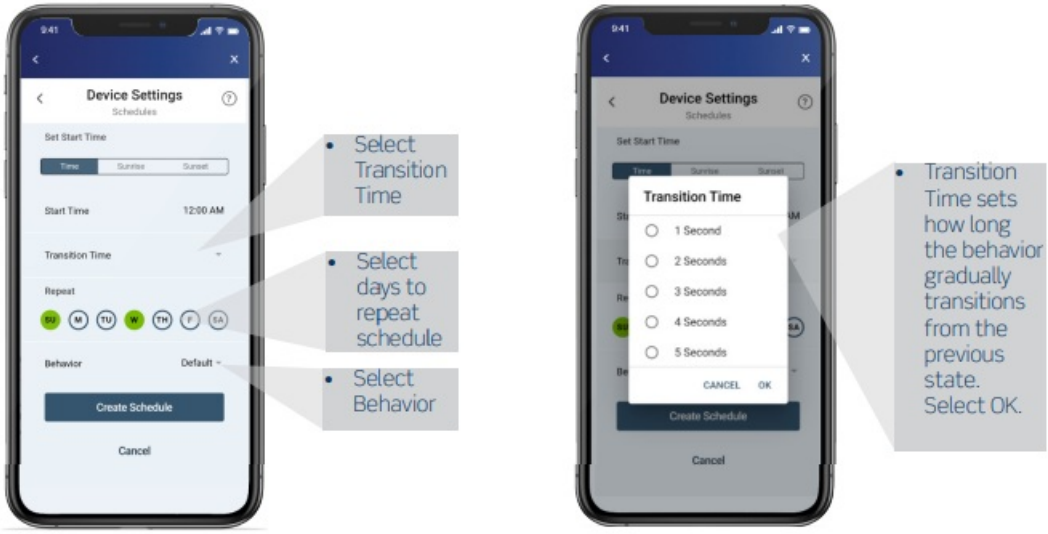

- Select the Behaviors Tab to create behaviors for the schedule you would like to set
- Select Create Behavior
- Set light level for behavior
- Define brightness level for Partial OFF setting, if activated
- Enter new behavior name
- Select Operating Mode
- Define brightness level for Partial ON setting, if activated
- Scroll screen to toggle on Daylight Enabled if desired
- Select Create Behavior



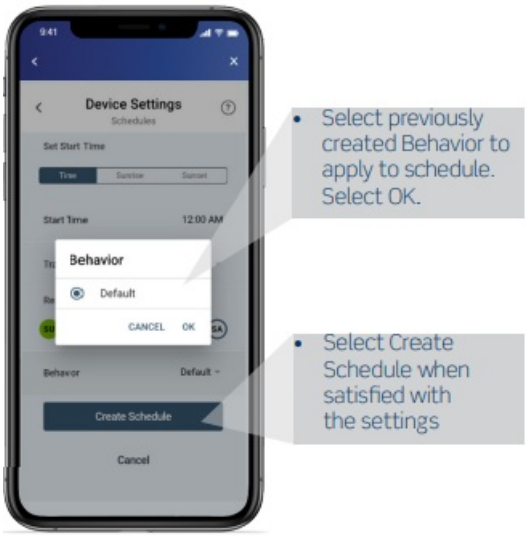

**Creating Schedules and Behaviors for a Group of Sensors**




- Select Schedules Tab
- Select Create Schedule
- Select Start Time: Choose between setting a manual time, or schedule to start before or after sunrise or sunset
- Note: A schedule can be set to begin at a certain time, or to begin 120 minutes before or after sunrise or sunset.
- Select the Sunrise or Sunset tab to go through the same process of creating a schedule. Except for starting before or after sunset rather than at a specific time




- Select Transition Time
- Select days to repeat schedule
- Select Behavior
- Transition Time sets how long the behavior gradually transitions from the previous state. Select OK.
- Select previously created Behavior to apply to schedule. Select OK.
- Select Create Schedule when satisfied with the settings




**Leviton Manufacturing Co., Inc. Lighting & Controls**
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**Leviton Manufacturing Co., Inc. Global Headquarters**
201 North Service Road, Melville, NY 11747-3138 tel 800-323-8920 tech line (8:00AM-10:00PM ET Mon-Fri, 9:00AM-7:00PM ET Sat, 9:00AM-5:00PM ET Sun) 800-824-3005

**Visit our website at: [www.leviton.com/integratedcontrols](www.leviton.com/integratedcontrols)**

## Documents / Resources

| | |
|---|---|
|  | LEVITON Smart Sensor App [pdf] User Guide<br>Smart Sensor App, Smart Sensor, App |

## References

- Integrated Fixture Control Solutions