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#### 1. GENERAL INFORMATION

SmartLoop enables the quick and easy integration of wireless lighting controls via Bluetooth mesh technology. This user manual explains how to use the app and the features available within it. For device specific information, refer to the corresponding specifications sheets or installation instructions.

#### 2. FIRST TIME USE

#### 2.1. APP INSTALLATION

Search for 'SmartLoop' on the app store for iPhone (iOS 12.0 or later, and Bluetooth 4.2 or later), or google play store for Android (Android 5.0 or later, and Bluetooth 4.2 or later).

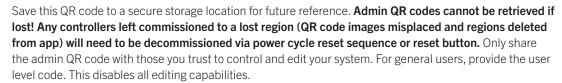


SmartLoop app

#### 2.2. INITIAL SETUP

When starting the app for the first time, it will ask for access to photos and Bluetooth. Grant these permissions. They are required for proper operation of the system.

A region called My Lights will automatically be created and QR codes for admin and user access are then saved in your photos. The code with an orange center and a hand pointing is for administrator access, while the code with a green center is for user access.







Admin

User

#### 3. NAVIGATING THE APP

#### 3.1. BOTTOM PANE

Five options are shown in the bottom pane when first starting the app. These are Lights, Groups, Switches, Scenes, and More:

- Lights- Add, edit, delete, and control the lights within a region
- Groups- Create, edit, delete, and control the groups within a region
- Switches- Add, edit, delete, and control the switches within a region
- Scenes- Add, edit, delete, and trigger the scenes within a region
- More- Edit schedules, manage regions, adjust high-end trim, and other advanced features

Each of these pages is explained in the corresponding section of this manual.

#### 3.2. DIMMING PAGE

The Dimming page is available for individual lights and groups. On this page, you can edit the name, adjust the light level with the rotary dimmer, toggle power on/off, set the auto level, and access the Sensor page.

To access the Dimming page for a light, press and hold a light icon on the Lights page.

To access the Dimming page for a group, press **Dimming** on the Groups page.





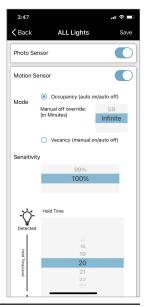




#### 3.3. SENSOR PAGE

The Sensor page is available for individual lights and groups. On this page, you can toggle daylight function (photo sensor), toggle the motion function, select occupancy or vacancy mode, adjust the manual off override time, adjust the motion sensor sensitivity, and edit the bi-level dimming timer and level settings.

To access the Sensor page for a light or group, press Sensor on the Dimming page.



#### 4. AUTO MODE FEATURE

Any light with an 'A' in the icon is in auto mode, which means the controller will automatically utilize sensors and a preset light level (auto level) to determine how to illuminate the space. A light in auto-on mode shows illumination lines in the icon, and means the light is currently illuminated. A light in auto-off mode shows just the 'A' in the icon, with no illumination lines, and means the light is off but ready to turn on from motion and linkage triggers.

#### 4.1. EDIT AUTO LEVEL

The auto level can be set on the light/group Dimming pages. By default, the auto level is 100%. Adjust the illumination in the space to the desired level. Then press .

When daylight sensing is disabled, the auto level is simply the specified dim level, such that an auto level of 80% is always at this dim percentage. With daylight enabled, the lighting percentage will adjust continuously in order to match the measured light level in the space when the auto level was set. So when daylight sensing is enabled, the auto level is a specified light level in the space rather than a simple set percentage. For more information on daylight control, see the Sensor Page section.





#### 4.2. MANUAL MODE

Any light with the 'A' missing from the light icon is in manual mode. The light will stay at the specified level until adjusted by a person or schedule. If motion sensors are enabled for a given light/group, lights left in a manual-on state will return to auto-off mode after no motion is detected for the sum of the motion sensor delays. This will prevent rooms from being left on in manual mode while unoccupied. However, if lights are set to manual-off, they will not timeout to auto-off mode.

Most actions will put a light into auto mode. Manual mode is triggered in a few ways:

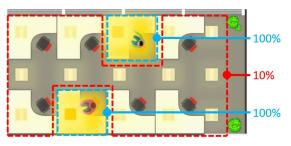
- Scenes, even if configured while lights are in auto mode, will trigger lights to the set levels in manual mode.
- When toggled off, all toggle buttons on the keypad and app will turn lights to manual and off.
- When toggled on, the keypad power toggle button will turn lights to manual and full on.





#### 5. LINKAGE FEATURE

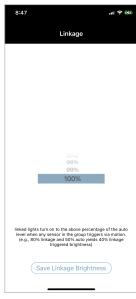
When a light detects motion, the linkage feature causes other lights in the group to turn on as well. The linkage triggered light level is the linkage level multiplied by the auto level. So if the auto level is 80% and the linkage level is 50%, a linkage triggered light will go to 40%. This multiplication rule applies to the occupancy standby level for linkage as well. For the same 80% auto and 50% linkage levels, a standby level (from sensor



settings) of 50% will yield a 20% light level during linkage standby (50%\*80%\*50%).

Consider an office group of 15 lights, 8 of which are within motion sensing range for the desk immediately below, respectively. The linkage is set to 10% and auto is 100%, daylight sensing is disabled for simplicity. When occupancy is triggered for a light, it goes to the auto level of 100%. Other lights go to the group linkage level of 10%.

A prompt to set the linkage level occurs when a group is created or the members are edited. It can also be edited at any time by pressing **Linkage** for a given group on the Groups page. Linkage can be enabled or disabled via the toggle button here as well. For linkage to function, it must be enabled and the lights to be linked must be in auto mode. Only motion information is shared via linkage, daylight measurements are unique to individual lights.



#### 6. REGIONS

Every region is a separate mesh system, and larger installations may be composed of a number of regions. To access the Regions page, press **More** in the bottom pane, then press **Regions**. Each region can contain up to 100 lights, 10 switches, 127 scenes, and 32 schedules. When created, QR codes are generated for both administrator and user levels of access, which enables the app user to download the commissioning data for that region from the cloud.

#### Admin QR codes:

- Enable full control of a region
- Can share admin and user QR codes

#### User QR codes:

- · Restrict any edits to the settings
- Can only share user QR codes

These QR codes are saved to the photo album on the commissioning phone/tablet. They should be handled as secure login credentials like usernames/passwords, so save them to a secure storage location for future reference. Only share the admin QR code with those you trust to control and edit your system. For general users, provide the user level QR code. This disables all editing capabilities. Admin QR codes cannot be retrieved if lost! Any controllers left commissioned to a lost region (QR code images misplaced and regions deleted from app) will need to be decommissioned via power cycle reset sequence or reset button.

#### **6.1. CREATE REGION**

Press **Create**, and enter a name for the region. The app will switch to this new region, and generate and store the QR codes on the phone/tablet photo album. It will automatically synchronize with the cloud as long as internet connection is available.







#### 6.2. EDIT REGION NAME

When in a given region (blue outline) press the rename icon to edit region name.

#### 6.3. SWITCH REGIONS

Press another region and confirm to switch to that region.

#### 6.4. LOAD REGION

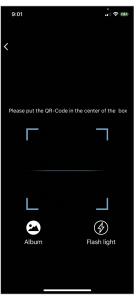
Press Scan or Select QR-Code. Then, either:

- A. Scan an image with your camera.
- B. Import QR code from your picture library.

#### 6.5. DELETE REGION

QR codes cannot be retrieved if lost! Ensure at least one copy of the admin QR code is saved somewhere safe. If a region is deleted from the commissioning device, it is still saved on the cloud and can be accessed again with the admin QR code.







Slide left on the region to reveal the **Delete** button. Press this and confirm to remove the region from the device. You cannot delete a region which is currently being used (blue outline).

#### 6.6. SHARE QR CODES

To give another user access to a region, either:

- A. Send the admin or user QR code image in your device photo library.
- B. Press the admin or user QR code icon on the Regions page and have the other device scan this.

#### 7. LIGHTS PAGE

The Lights page is the main interface for controlling the lights in a region. Press **Lights** in the bottom pane to access this page.

#### **7.1. ICONS**

Each light can display different icons to indicate the state of the device.

- A. Auto-off- Light output is off, and will be triggered to auto-on if motion is detected.
- B. Auto-on- Light output is on, and light is operating in auto mode.
- C. Manual-off- Light output is off. By default, light output stays off until a scheduled event or manual command overrides this. If the manual off override time has been adjusted on the Sensor page, the light will return to auto-off mode after this time elapses with no motion detected.
- D. Manual-on- Light output is set to a manual level via a scene trigger or manual override command. It will return to auto-off mode automatically after the sum of the motion sensor delays elapse with no motion detected.
- E. Offline- Controller is most likely either not getting power or is out of range of the mesh network.
- F. Blue Light Name- This is the light which the phone/tablet is using to connect to the mesh network.
- G. All Lights- A default full system on/off switch, toggles all lights in the region between auto-on and manual-off.







#### 7.2. ADD

With controllers installed and lights powered on, press + or **Click to Add**. The app will begin searching for available lights. Use the Top20 or Top50 filters to display lights with the best reception and help reduce network congestion.

- 1. Check open each light to be commissioned to the region.
- Press Add to confirm selections. The selected lights will now appear on the Lights page.

Note: Press **Not Added** or **Added** in the top pane to view which controllers are available to commission or already commissioned to the region.

Note: Press a light icon to toggle power to help identify it. If a light cannot be found, move closer to the light, ensure controller is not enclosed in metal, and/or follow factory reset procedure.

#### 7.3. DECOMMISSIONING

Decommissioning can be done by one or more methods depending on the controller model being used.

#### In the app:

The phone/tablet must be connected to the device through the mesh network in order for the controller to be factory reset. Otherwise, the light will simply be removed from the region in the app, and the controller will need to be factory reset using one of the other methods below.

- 1. Go to the Lights page.
- 2. Press **Select** and check **v** the desired lights to decommission.
- 3. Press **Delete** and confirm.

#### Power cycle reset sequence:

If a controller is assigned to another region, it will not appear when searching for new fixtures. Perform the below power cycle sequence to factory reset the controller.

- 1. Power on for 1 second, then off for 10 seconds.
- 2. Power on for 1 second, then off for 10 seconds.
- 3. Power on for 1 second, then off for 10 seconds.
- 4. Power on for 10 seconds, then off for 10 seconds.
- 5. Power on for 10 seconds, then off for 10 seconds.
- 6. Turn the light back on. The device should now be decommissioned and ready to add to a region.

#### Reset button:

Certain devices have a reset button. Press and hold this button for

3 seconds while powered to initiate a factory reset. Refer to device specifications for more details.

#### **Magnetic Reset:**

Certain devices have a magnetic reset marking on the housing. Hold a magnet on this marking for 5 seconds while powered to initiate a factory reset. Refer to device specifications for more details.

#### 7.4. RENAME

Press and hold a light icon to enter the corresponding Dimming page. Press the blue bar to edit the light name.

#### 7.5. SORT AND RECONNECT

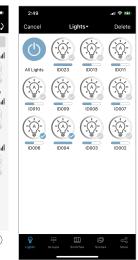
Press the **Lights** drop down menu in the top pane to choose between different sorting options, or to reconnect to the region.

#### 7.6. SWITCH / DIM

There are two methods to control individual lights on the Lights page. Adjusting a light either way will stay in auto or manual mode.

- A. Press a light icon and immediately slide left/right to adjust light level.
- B. Press and hold a light icon to open the Dimming page. Refer to the Dimming Page section for more details.













#### 8. GROUPS PAGE

To simplify control, lights can be grouped together. Press **Groups** in the bottom pane to access this page. The only default group is the All Lights group, which includes all lights in the region.

#### 8.1. CREATE

- 1. Press + and enter a name for the group
- 2. Check of the lights to be added to the group, then press **Save**.
- 3. Adjust the linkage brightness, then press **Save Linkage Brightness**. The new group will now appear on the Groups page.

#### 8.2. DELETE

Press and slide left anywhere on a given group to show the **Delete** button.

#### 8.3. RENAME

Press the blue bar for a given group to edit the group name.

#### 8.4. EDIT MEMBERS

Press **Members** for a group to open the Members page. Check  $\bigcirc$  each desired fixture. Press **Save** to confirm.

#### 8.5. EDIT LINKAGE

Press **Linkage** for a group to open the Linkage page. Adjust to the desired level and press **Save Linkage Brightness** to confirm. The **Link** toggle switch will enable/ disable linkage for the group.

#### 8.6. ON (AUTO), OFF

Press **Auto** to turn a group on in auto mode. Press **Off** to turn a group off in manual mode.

#### 8.7. DIMMING

Press **Dimming** to open the Dimming page for the group. Adjustments and settings applied here and on the Sensor page apply to all members of the group (where applicable for sensors). Refer to the Dimming Page and Sensor Page sections for more details.













#### 9. SCENES PAGE

A scene is a command for lights/groups to go to specific manual levels. When a scene is triggered, the included checked members go to these desired manual settings. Press **Scenes** in the bottom pane to access this page. Three default scenes exist:

- A. Full Light- All lights go to manual-on at 100%.
- B. All Off- All lights go to manual-off.
- C. Auto Light- All lights go to auto-on.

#### 9.1. CREATE

Programming a scene involves selecting members and designating their actions.

- 1. Press +, and enter a name for the scene.
- 2. Check the lights/groups to be included in the scene.
- 3. For any checked light/group, press and hold to open the Dimming page.
- 4. Adjust to the desired level, and press **Back** in the top pane when done.
- 5. Repeat steps 3 and 4 for each checked Ø light/group.
- 6. Confirm visually that all checked 🕢 lights are at the desired levels. Press **Save** in the top pane.

#### 9.2. CREATE SEQUENCES

A sequence is a repeating cycle of scenes. It allows for a simple way to achieve dynamic lighting. This feature is only compatible with SmartLoop DMX controllers. Programming a sequence involves selecting scenes in the preferred order as well as the hold and fade times for each state.

- 1. Create the scenes for each state to be in the sequence, and confirm each functions as desired.
- 2. Press **Sequences** in the top pane.
- 3. Press +, and enter a name for the sequence.
- 4. Press the scenes to be included, then press **Next Step**.
- 5. Scroll **Hold Time** to edit the duration of each state.
- Scroll **Fade Time** to edit the transition duration between states.
- 7. Press **Done**.

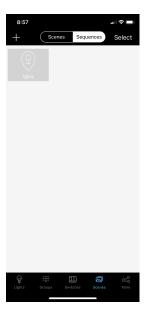
#### 9.3. DELETE

- 1. Press **Select** in the top pane.
- 2. Check of the desired scene.
- 3. Press **Delete** in the top pane.

















#### 10. SWITCHES PAGE

The Switches page is used to program the keypads and timekeepers in a region. Press **Switches** in the bottom pane to access this page.

#### 10.1. ADD

- 1. Press + to enter the Scanning page.
- 2. A. On a keypad, press and hold **Auto** and ^ for about 2 seconds to enter pairing mode. The Added Switches counter will then increment.
  - B. On a timekeeper, press and hold the button for about 2 seconds to enter pairing mode. Once the LED briefly flashes off and on, the button can be released. The Added Switches counter will then increment.
- 3. Repeat step 2.A or 2.B to add more devices, or press **Done**.

Note: A keypad will automatically exit pairing mode after 30 seconds, or if another button is pressed.



#### 10.2. PROGRAM

- 1. Press the gear icon to open settings for a keypad.
- 2. Press the blue bar to edit the device name.
- 3. Press **Lights** or **Groups**, then check the desired light/group. Only one light/group can be assigned per keypad.
- 4. Press Next Step.
- 5. Press up to 3 desired scene names to program to the keypad **Scene** button. If no scenes have been programmed and are still desired for keypad commissioning, see the Scenes Page section.
- 6. Press Save.

Note: Timekeepers only need to be added to function, they do not need to be programmed.

#### **10.3. DELETE**

- 1. Press the gear icon to open settings for a keypad.
- 2. Press the trash can icon to delete the switch from the region.









#### 11. DIMMING PAGE

The Dimming page is accessible for each light/group. Press and hold on a light, or press **Dimming** on a group to access this page. The displayed features affect the light/group shown in the blue name bar.

#### 11.1. BRIGHTNESS ONLY LIGHTS

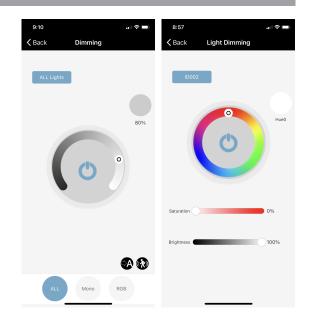
- A. Press and slide the rotary dimmer to adjust the light level.
- B. Press the power button to toggle between auto-on and manual-off.
- C. Press Auto A to set the auto level to the current level.
- Press Sensor to open the Sensor page. Refer to the Sensor Page section for more details.

#### 11.2. DMX LIGHTS

- A. Press and slide the rotary dimmer to adjust the color.
- B. Press the power button to toggle between on and off.
- C. Press and slide the Saturation dimmer to adjust the color intensity.
- D. Press and slide the Brightness dimmer to adjust the light level.

#### 11.3. COMBINATION

Accessing the Dimming page for a group with multiple light types will display a combination layout. All can be used to adjust states across all controllers where applicable. The Mono page will show the layout for brightness dimming lights, and RGB will show the layout for DMX lights.



#### 12. SENSOR PAGE

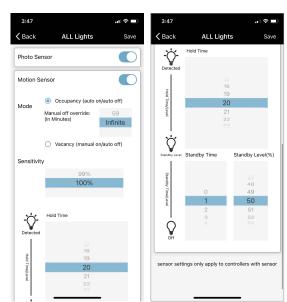
The Sensor page is accessible for each light/group. Press Sensor 🚳 to access this page.

- A. Press **Photo Sensor** to toggle dynamic daylighting on/off.
- B. Press **Motion Sensor** to toggle motion sensor on/off.
- C. Scroll **Manual off override** to edit the time to stay in manual-off. The light(s) will revert to auto-off after this time elapses with no motion detected.
- D. Scroll **Sensitivity** to edit the strength of the motion sensor.
- E. Press **Occupancy** or **Vacancy** to edit motion sensor mode.
- F. Scroll **Hold Time** to edit hold time at auto level (dims to standby level after).
- G. Scroll Standby Level to edit standby dim level.
- H. Scroll **Standby Time** to edit standby time at standby level (dims to auto-off after).

Daylight enabled auto mode should be set when ambient light conditions are relatively low. The daylight feature dynamically adjusts light output to match the light level measured when the auto level was set. Therefore, if the photo sensor is saturated with natural light, the luminaire will always output the highest level to try to match this.

Note: Daylight sensing data is not shared with other lights. A controller only uses these measurements to adjust its own output when the photo sensor is enabled.

Note: If a light/group is not using linkage or a sensor directly, ensure that **Motion Sensor** is toggled to the disabled position, and/or that **Hold Time** is set to infinite. Otherwise, lights will turn off after the time delays due to lack of motion/linkage triggers. The luminaire will still come on to the auto level for either option, but the former will not display the 'A' in the light icon.







#### 13. SCHEDULES PAGE

To access the Schedules page, press **More** in the bottom pane, then press **Schedules**.

#### 13.1. CREATE

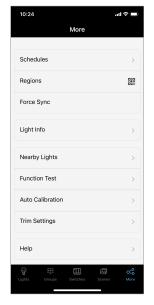
- Press + or Click to Add, and enter a name for the schedule.
- 2. Ensure **Enable** is toggled on.
- 3. Press **Scheduled**, select the tab according to if the event should act on a light or group, or trigger a scene. Check of the desired light/group, or highlight the desired scene. If a light or group is selected, the desired action to take for that light/group should then be selected at the bottom of the page. For the sensor change options, these changes will be retained. To change them back to the original enable/disable states, either apply another schedule or change the settings back manually on the Sensor page for the affected lights. For Set **Auto Level**, this is the same as pressing at the set level at the scheduled time. Set this to trigger at night when commissioning during a bright day would otherwise prevent you from establishing the desired light level in the space due to saturation of the daylight sensor.
- 4. Press Done.
- 5. Press Set Date.
- 6. A. For a recurring schedule event, set **Repeat** to the toggle on position. Highlight the days on which this schedule should trigger.
  - B. For a single schedule event, set **Repeat** to the toggle off position. Scroll to set the desired date.
- 7. Scroll Set Time to the desired schedule trigger time, then press Done.
- 8. Edit transition time if preferred. Otherwise, press **Done**.

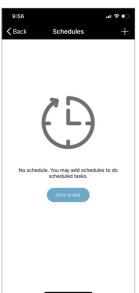
Note: Schedules can be set up to 1 year in advance for specific dates or repeating on a weekly schedule

Note: Overriding Schedules: Schedules can be overridden manually with a wall switch or UI command

#### **13.2. DELETE**

Press and slide left on a schedule, then press **Delete**.

















#### 14. ADDITIONAL FEATURES

#### 14.1. CLOUD SYNCHRONIZATION

Data synchronization with the cloud is automatic, but can be manually triggered on the **More** page. Press **Force Sync** to synchronize. If the region fails to sync, a red dot will appear next to the region name.

#### 14.2. LIGHTS INFO PAGE

Information on lights, groups, and scenes within a region can be found on the Light Info page. Access this via the More page.

#### 14.3. AUTO CALIBRATION

Auto Calibration is on the More page. It is used to help eliminate the effect of natural light when setting up the auto level with daylight enabled. During the calibration process, lights will turn on and off several times as they attempt to subtract out the environmental light from the overall light measured, and set the auto level to be the

remainder. If the environmental light is too bright, this function will not succeed. In this case, it is recommended to schedule the set auto level for when it is dark in the space.

- 1. Select the group to calibrate.
- 2. Scroll to the desired brightness for night.
- 3. Press Start.

The test will complete on its own, and remove the testing pop-up message when finished.

#### 14.4. FUNCTION TEST

Function Test is on the More page. It is for testing the function of the motion sensor.

- 1. Ensure all sensor detection area are clear of motion.
- 2. Ensure all lights are in auto mode.
- 3. Press **Motion Sensor Test** to begin testing. The lights will be put in auto-off mode.
- 4. Trigger motion for each fixture to confirm function.

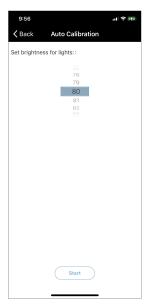
#### 14.5. TRIM ADJUSTMENTS

Some installations require trim adjustments as a global setting for lights. This takes priority over all other dimming settings.

- 1. On the More page, press **Trim Settings**.
- 2. Select the Lights or Groups tab, and then press on the light/group to be edited.
- 3. Press **High-end Trim** (100-50%), **Low-end Trim** (1-50%), or **Daylight min dim** (1-50%, controls how low the daylight sensor is able to dim the light).
- 4. Scroll to the desired trim setting.
- 5. Press Send.















#### **15. FAQS**

For additional information and support, please call us at 1-800-464-2680, email productsupport@keystonetech.com, or visit https://keystonetech.com/smartloop/ for more support materials.

#### 15.1. COMMISSIONING

Q: Why can't I find lights to commission?

A: There could be a few potential causes. Consider the below troubleshooting suggestions.

- 1. The controller may not have power or may be wired improperly. Refer to the wiring diagram in the instructions and/or ensure the power is properly applied to the circuit.
- 2. The controller may be out of range of the phone/tablet being used for commissioning, or reception may be blocked by obstacles. Move closer to the controller or confirm that the controller is not installed such that it is fully enclosed by metal.
- 3. The controller may have already been commissioned to another region. Try factory resetting the controller.
- 4. The phone/tablet may be having an issue. Try restarting the app, toggling the Bluetooth radio off and on, or turning the phone/tablet off and on again.
- Q: I commissioned lights to a region, but some/all are missing or programmed incorrectly when I check them later or on another device. What's happening?
- A: This could be a cloud synchronization issue. All changes made to a region are synchronized to the cloud after each change. Intermittent or no internet access on the commissioning device may cause problems with committing the changes properly. Connect to a wifi network or hotspot and try commissioning again.
- Q: I assigned settings and they didn't take for some/all of the lights. What happened?
- A: The command may have not made it to the light. Try re-committing the command, or reconnecting to the region.
- Q: What's the best way to commission a system that has over 100 controllers?
- A: Use multiple regions. If you break them up according to the circuit breaker wiring, we recommend turning the breakers off for all but one intended region. In this way you can confidently add all lights at once for the remaining ones without concern of adding lights intended for another region. Once you've ensured all the lights for your first region are properly added, turn the breakers back on and add the rest of the lights for each region. If you don't have the convenience of turning off breakers, then adding a few lights at a time is recommended. Stand underneath a few lights you'd like to add, these will have the strongest reception and show up near the top of the identified lights. Tap on/off to identify them, and then add them. Avoiding adding lights in long straight lines as meshes perform best when bubble shaped.
- Q: I've tried adding lights but it keeps failing for many of them. What should I do?
- A: Uncommissioned lights are all part of a default mesh network. The more lights present, the more network traffic there is to introduce communication errors. Try adding fewer lights at one time, turning off some breakers, and using the 20/50 filter when adding lights.
- Q: Can I have multiple people commissioning at the same time?
- A: If they are working on separate regions out of wireless range of one another, yes. But not on the same region, as cloud synchronization issues may occur. Also it is not recommended to be in Bluetooth range of one another, as both phone will be trying to communicate with some of the same lights simultaneously.
- Q: Can I use different sensor settings for different situations?
- A: No, sensors can only have one set of settings.
- Q: What's the default auto level?
- A: 100%, but daylight may pull this down if it's particularly bright in the space.
- Q: If we already know how we want to group lights, is there a way to set up commissioning ahead of time and block out unauthorized access before all the lights are added?
- A: No, lights can only be configured once added to a region.
- Q: Can you export a commissioning report showing the settings applied to all the devices in an installation?
- A: Not at this time.





#### **15.2. REGIONS**

- Q: How many lights can I connect on one region?
- A: 100 controllers can be added to each region.
- Q: How many regions can I have?
- A: Unlimited. A new QR code is generated each time a region is created.
- Q: How should I break up regions?

A: It depends on the application. For a small office space or auditorium, it may make sense to make one region. For a warehouse, you may break up the site into a few regions as there could be hundreds of lights. For a school, all the classrooms might operate independently. So it may make sense to have a region for each room. If you want one keypad to control a whole area though, then it might be preferable to have one region instead. The best way to break up an open space into multiple regions is to pick clear landmarks as physical dividing lines. Try to break up regions into more square areas rather than long lines, to avoid a signal needing to hop across many nodes to get to an end node.

#### 15.3. REGULAR USE

- Q: I sent a command and it didn't work or some lights ignored it. What's going on?
- A: Try resending the command. Try moving to the physical center of the mesh and reconnecting. If it repeatedly does not work, try recommitting your commissioning/grouping settings to ensure everything is as you want it. Try restarting the app or turning the Bluetooth radio off and on again. If using Android, try an iPhone; Android is a large ecosystem and consistent performance is harder to ensure across the vast library of available devices.
- Q: The statuses of my lights on the app are not accurate, or are delayed. What's going on?
- A: Try reconnecting to the region near the physical center, which will re-establish the proxy node. This may establish a stronger connection to the mesh. Also note that once a proxy is selected, walking further away will weaken the signal strength to the proxy, and therefore the connection to the mesh.
- Q: My lights aren't turning off/on how I want them to, what's going on?
- A: Reach out to product support to discuss how you'd like your space to operate, we can help ensure the space is commissioned as it should be and provide debugging support if necessary.
- Q: What is auto mode?
- A: A light can either be in manual mode, where it's at a set output level, or auto mode, where it uses the sensors and settings you've provided to decide how to illuminate the space automatically and appropriately. Refer to the user manual for more details.
- Q: What level do lights come on to after a power outage recovery?
- A: The auto-on level.
- Q: I keep seeing orange exclamation marks popping up and disappearing on my lights page. What's going on?
- A: This is often an issue with network reception. This doesn't necessarily mean the light is offline, but rather the phone is unable to communicate to it through the mesh. A signal can hop across the mesh up to 4 times. If it's a large space and you are commissioning from the edge, it may be hard for the signal to find a good path. Walls and other barriers to radio signals could further impede reception. We recommend standing in the center of the region, and reconnecting to the mesh once there so that your phone is connected directly to the nearest controller.
- Q: Why is one of the light names in the Lights page colored blue?
- A: This is the device that the controlling phone/tablet is using to connect to the mesh network. It is the proxy node.





#### **15.4. GROUPS**

Q: Can a light be a member of multiple groups?

A: Yes

Q: A light is in groups A and B. I apply sensor settings to group A, and then different sensor settings to group B. What settings does my light have now?

A: The light will have the settings for group B, because it was the last setting change command it received.

Q: How should I break up groups?

A: Generally by functional space where a keypad may be used to control a given group.

#### 15.5. SCENES/MANUAL-MODE:

Q: Can I use a scene to trigger alternate sensor settings?

A: No, a scene is only a collection of manual set levels. Each controller can only have one set of sensor settings associated with it.

Q: The scene isn't doing what I want it to do, what's going on?

A: A scene requires specifying (1) which lights are part of the scene, and (2) what level they are at when you save. If you don't set them to the level you want and apply the checkmark, the scene won't work as you want it to.

Q: I set my lights to a scene or manual level, and they keep turning off. Why?

A: Any light in manual override (scenes are a collection of manual levels) will time out and return to auto-standby after no motion is detected for the sum of the hold and standby times. If either hold or standby is set to infinite, then the lights will not time out.

#### 15.6. SCHEDULING:

Q: Can I set my lights to do something unique with scheduling?

A: Not directly, a scheduled event is meant to trigger a light/group on, or a scene. So if you want to trigger some unique light settings, simply set a scene to do this, and then trigger the scene via the schedule.

Q: What happens if someone changes the lights after a scheduled event goes off?

A: It overrides it and the lights resume normal operation. Scheduling for some control systems is window based, where it has a start and finish time. Interruptions during this cause confusion, as different people may want this handled in different ways. SmartLoop uses single trigger based scheduling, so there's no confusion about what would happen. A schedule event triggers, and then any command that comes in after is then the new priority. If you want to do a windowed schedule, simply make 2 events.

Q: What happens after a schedule triggers? Do they stay that way or will they detect motion again?

A: Depending on the sensor settings, they will time out back to auto standby mode after the hold and standby time elapse with no motion detected.

#### 15.7. LINKAGE:

Q: What level do lights go to with linkage?

A: If a light detects motion itself, then it comes on to the auto level. The other linked lights which did not directly detection motion will go to the linkage level as a percent of the auto level. So if you have an auto level of 80% and a linkage of 50%, the light directly detecting motion goes to 80%, and the others in the group go to 40%.





#### 15.8. APPLICATION

- Q: How many luminaires can be wired to one controller?
- A: Refer to the maximum load current called out in the spec sheet for the specific controller. For low voltage controllers, it's limited by the
- 0-10V sinking current rating; and you should account for 2mA for each driver. So a 10mA rating would allow for 5 drivers.
- Q: I currently have a zone controller in the wall for the whole room and I don't want to rewire this. What can I use?
- A: Currently we don't offer a high current zone controller. Depending on your load requirements, the other line voltage controllers may suffice.

#### 15.9. KEYPADS

- Q: Do keypads control uncommissioned lights?
- A: All uncommissioned lights operate on a default mesh network. New keypads may be in an uncommissioned state, in which case uncommissioned lights will respond to these keypad commands if they are in range on the default mesh network.