J2 Light® - SMART BLU™ APP
2018 User's Manual

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Date: 2018

Confidential

Update History:

Version	Author	Date	Description
V1.0	Jeff Hayman	2018-05-25	Created
V1.01	Jeff Hayman	2018-07-23	Updated Appendix

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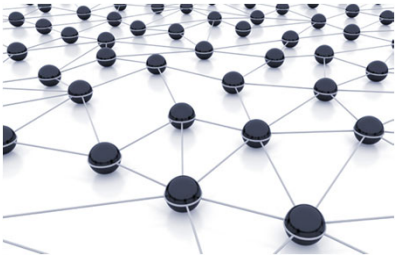
SMART BLU™

Simple, Affordable, and Effective Bluetooth Lighting Control

iOS and Android Compatible APP



SMART BLU™ is a wireless lighting control system that utilizes Bluetooth 4.0 Mesh Network technology to transmit lighting control data from a smartphone to Lights & Switches (**Nodes**). Nodes cooperate in the transmission of data to ensure integrity.

SMART BLU™ enables significant power and maintenance savings for LED lighting through simple automation processes while allowing for individual freedom to adjust as necessary.

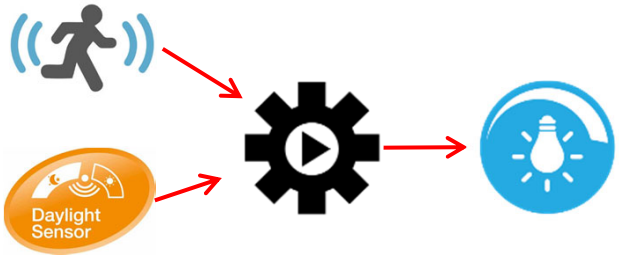
Mesh Networks (**Zones**) can range from 1 to 100 Nodes maximum. Buildings may be divided into many different Zones with each having it's own distinct encryption and QR Code. For example, a School may have classrooms, corridors, gym and offices divided into Zones. An Office Tower could have each floor divided into open area, perimeter offices, meeting rooms and reception Zones.

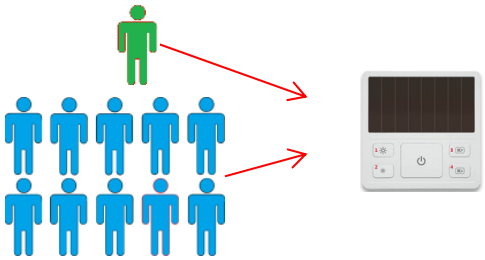
Two levels of smartphone access are available:
1. Administration: which allows full access to program settings.
2. Secondary: which allows lighting adjustment but does not allow access to program settings.

Nodes consist of Lights, Switches, & Gateways. Lights may include onboard motion detectors and daylight photo sensors.

Lights may be offered in <u>one</u> color (mono-dimmable) or in <u>two</u> colors (2-channel dimmable) . 2-channel Lights may be color-tuned anywhere from very warm to very cool.

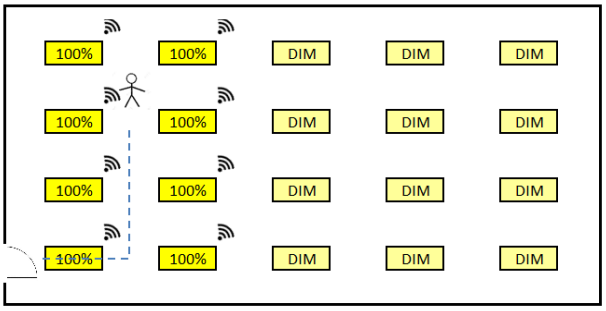
Lights may be supplied without sensors or they may be supplied with motion and/or photo sensors to allow automation of Light level control.

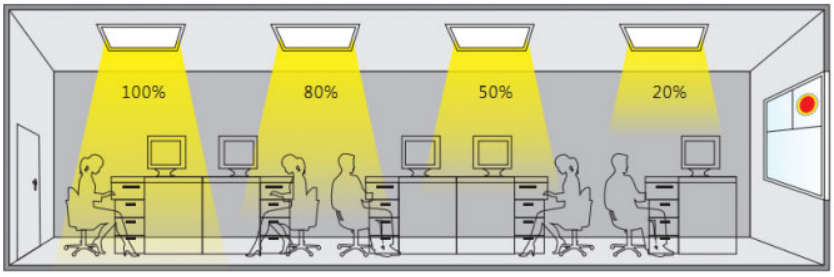




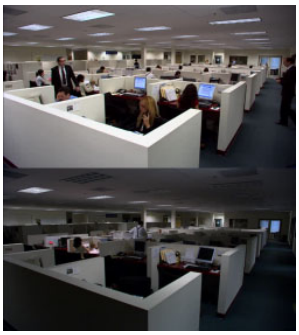
Lights may be controlled individually or in Groups. They can be set to operate automatically via sensors and/or respond to manual switches or smartphones.

Lights may also be linked such that if one Light motion sensor is tripped, all other Lights in the Group respond in unison thus making the whole space appear lit and less foreboding.





Daylight Harvesting is taking advantage of natural light that enters an interior space through windows by adjusting artificial lighting to save power. SMART BLU™ can dim Lights closest to windows lower than Lights further away from windows.



Scenes may be created with Groups and/or Individual Lights by adjusting brightness levels and color temperature (if available). Consider meeting rooms or classrooms when presentations are given and you wish to dim the light to view a smartboard or TV but still wish to provide light on the presenter.

Automation Defaults

SMART BLU™ incorporates Motion and Photo detectors. Motion detectors sense the presence of people and Photo detectors measure light levels. When enabled, these detectors can automatically make light level adjustments within a space without requiring manual adjustments by the occupants. The idea is to Automatically provide the right amount of light when it is needed and to dim or shut lights Off when it is not. The purpose of making automatic adjustments is to **save on energy and maintenance costs**.

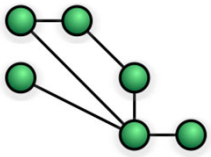
SMART BLU™ allows you to set Automation Defaults (Colors, Brightness, and Motion/Photo Detectors) for individual Lights or Groups of Lights. These may be disabled by choosing static Scenes via the APP or from physical Switches.

Automation Defaults may be set in two different sections of the APP; “Lights” and “Groups”. ***NOTE: If you set an Automation Default in one section, then alter the settings in another section, the LAST settings you make will be expressed by the system.***

An Automation icon will appear in the following sections where it applies.

Definitions:

Dynamic Lighting Control Network: A group or system of interconnected Lights, Switches, and other communication hardware such as Smartphones and Wireless Gateways (routers) that actively share data and manage artificial Light brightness and or color with the purpose of saving energy and maintenance costs while improving occupant comfort and productivity.



Mesh Network: when Lights and Switches connect directly, dynamically and non-hierarchically to as many other Lights and Switches as possible and cooperate with one another to efficiently and durably route data. Consider that data may take different paths such that if one Light or Switch fails, data can still travel.

Motion Detector: Also known as an Occupancy Sensor. Is a device that detects/senses the presence of people or moving objects such as cars or forklifts. Motion Detectors may incorporate PIR/Passive Infra-Red, Microwave/Doppler, Ultrasonic, or other technology for this purpose. SMART BLU™ incorporates Motion Detectors in each Light. This allows for better and more granular coverage and enables control strategies such as Linkage. Motion Detector automatically allows Lights to Dim Up when people are present and Dim Down when people do not occupy a space.

Photo Sensor: Also known as a Photocell or Daylight Sensor. Is a solid state device that converts light into electricity for the purpose of measuring brightness or light intensity. SMART BLU™ may incorporate a Photo Sensor in each Light if an application can take advantage of Daylight (sunlight). When sufficient daylight is available in a space such as a classroom, Photo Sensor data will automatically adjust Lights closest to windows to Dim Down the most while Lights furthest from windows Dim Down the least.

White Tunable: Also known as 2-Channel Dimming. Two colors of White LEDs are used – warm that has more red content and cool that has more blue content. White tuning adjusts outputs of each color up and down dynamically to provide everything from fully warm to fully cool and everything in between. Today these outputs are static but in the future they may become dynamic to mimic the various colors of daylight from sun up to sun down.

3 SMART BLU™ Lighting Controls Philosophy

The goal of the SMART BLU™ lighting control system is to strike a balance between optimizing energy efficiency and maintaining/improving occupant productivity and well being. This must be foremost in mind when setting lighting parameters. Our definition of a successful project is one that is:

A. **Affordable**.
B. **Simple** to install and maintain.
C. **Efficient** in managing energy consumption without disrupting occupants or requiring intervention from building management.

Before implementing the SMART BLU™ lighting control system we would encourage giving advance notice to building occupants to gain their support. People will respond favorably and will offer more patience during the transition if you explain the reasoning for installing dynamic lighting controls. Following are key reasons:

1. Dynamic lighting controls are more responsive to human behaviour and will offer greater comfort and productivity.
2. Saving energy is environmentally friendly.
3. Saving energy reduces both consumption and maintenance costs.

As you set dimming levels or timers to dim and/or shut off lights, make sure to use a conservative approach. Being too aggressive will lead to occupant discomfort and complaints. As a rule:

A. If in doubt, program Lights towards brighter end of your consideration.

B. SMART BLU™ motion detectors are designed to detect coarse body movements, but if a person stays in the same position for extended lengths of time such that timers elapse and lights dim or go off, this may lead to complaints. Make sure that time delays are adequate to allow for some movement of the occupants (Note: Research suggests that people stand up or move every 20 minutes. Therefore, allowing for 20-30 minutes would actually be a healthy reminder that you can defend should an occupant complain).

1 General Description

SMART BLU™ is a dynamic wireless lighting control system that utilizes Bluetooth® 4.0 Low Energy technology in a mesh network. Smart Lights and Switches may be programmed via APP from iOS or Android based smartphones. This system is offered by J2 Light®. See graphical overview on pages 2 and 3.

The SMART BLU™ APP will allow the users to:

1) Create unique encrypted (**Zones**). Each Zone limited to 100 maximum (Lights + Switches + Gateways)**.**

2) Add Lights to a Zone or Delete Lights from a Zone.

3) Add Switches to a Zone or Delete Switches from a Zone.

4) Automatically and / or manually control multiple types of Lights including:

A. Mono (single) color on/off.
B. Mono (single) color dimmable.
C. 2-Channel color tunable (warm to cool) and dimmable.
D. Full color tunable (RGB) and dimmable.

5) Form Groups of Lights. As a Group, Lights may be easily:

A. Linked. A motion detector from one light signals all lights within the Group to dim up to a programmed level.
B. Switched on and off.
C. Dimmed.
D. Color tuned.
E. Programmed. Onboard motion detectors can have time delays and dimming levels set.

6) Create Scenes where individual Lights and/or Groups of Lights may be turned on/off, dimmed, or color tuned at the same time and then saved. After Scenes are saved they may be selected from the APP or by switches that are programmed by the APP.

7) Specify privileges on smartphones by scanning unique QR codes that get created during the programming process. Administrators have full access for programming purposes. Secondary level does not allow programming changes, only the lighting adjustments that would apply to a Switch (on/off, dimming, scene selection).

8) Set calendar and time of day functions.

9) Support multiple smartphones in one project.

10) Use immediately upon installation. No account or password required.

NEW ADDITION

The new SMART BLU™ Managers accessory APP will allow the building managers to:

A. Set an artificial top light level that is invisible to end users. ie. Actual top light output may occur at 30W but could be artificially set to a lower wattage. Later, the light level could be increased if necessary.

B. Provide firmware updates.

3 Mapping Zones for your Building

Before you begin programming Lights and Switches in your building with the SMART BLU™ APP you need to consider how you will divide your building into Zones. Zones are discussed in the graphical overview on Page 2 and in the general description given on Page 7. Restated below:

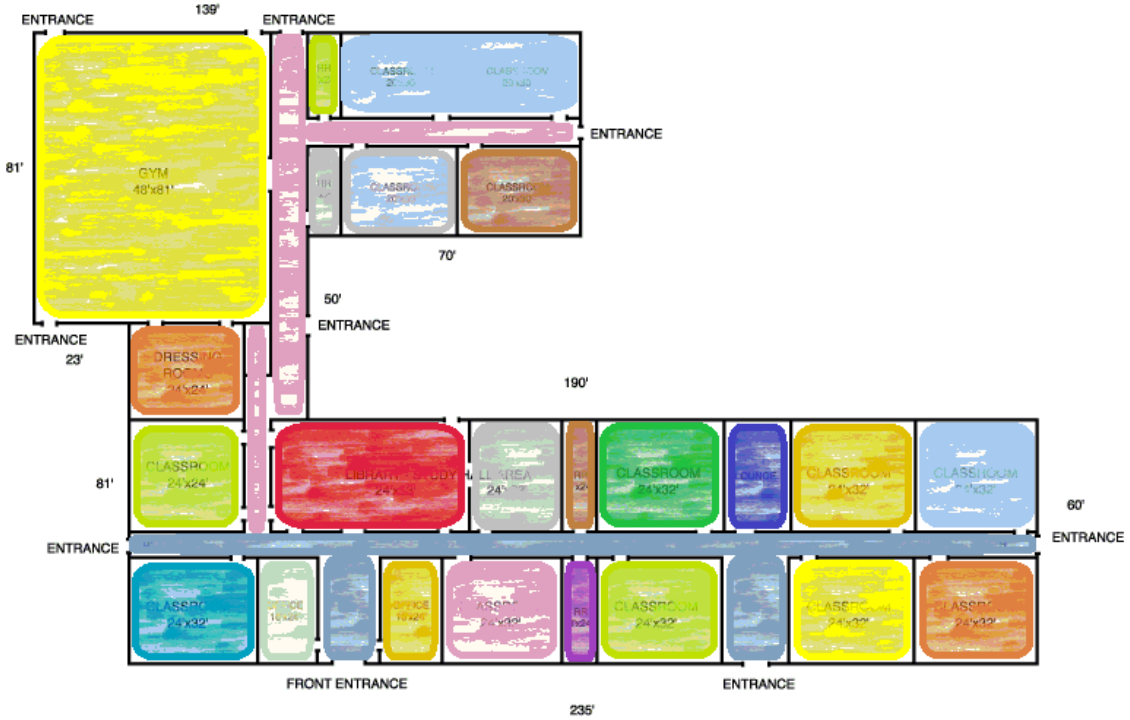
Zone = (1 to 100 maximum : Lights + Switches)

Each Zone has it's own unique Encryption and is given two QR Codes:

1. Administrative = allows complete access to programming for all settings.
2. Secondary = limited access only such as on/off, dim up, dim down, scene selection.

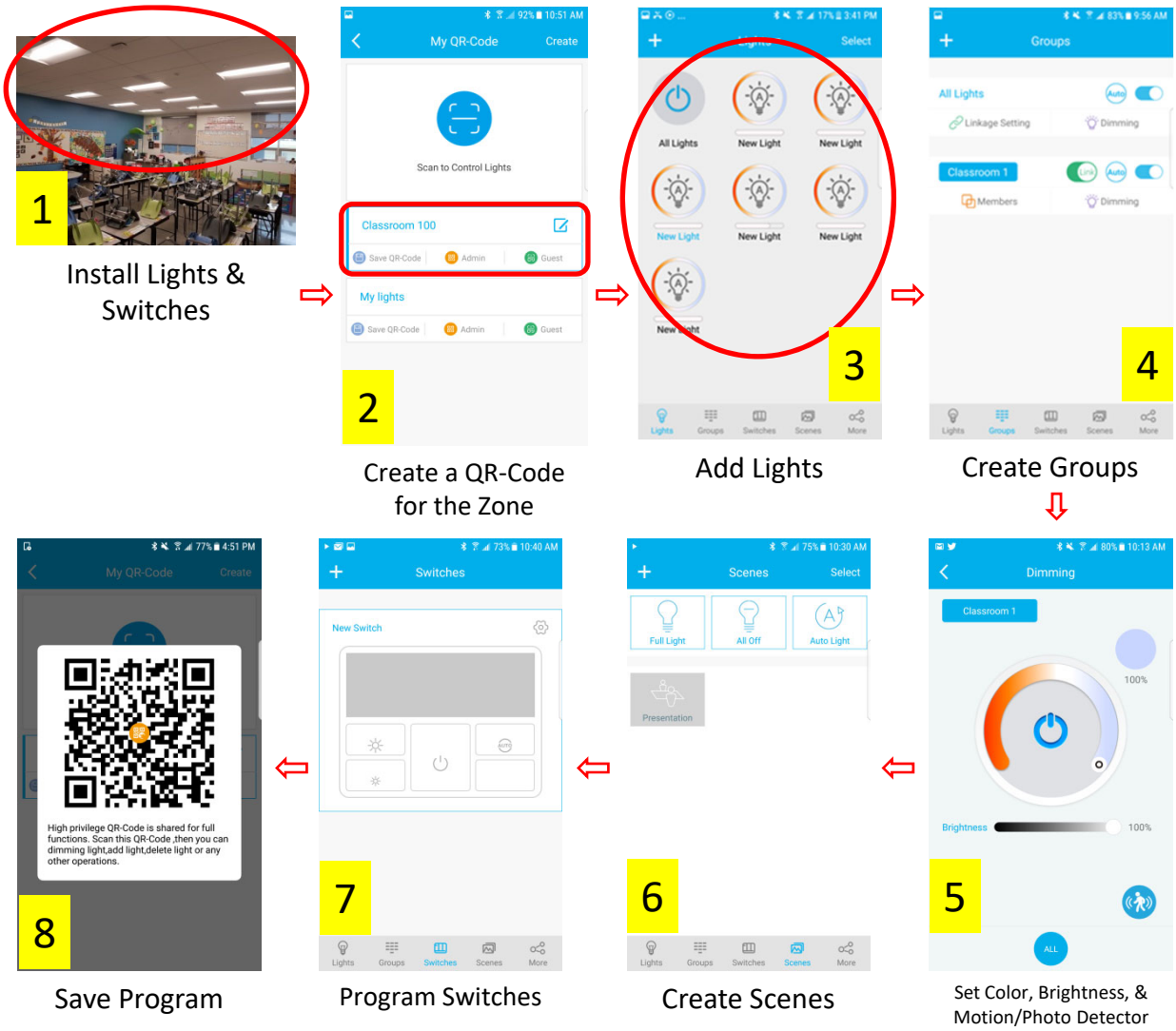
Consider mapping a school as an example. A school will have a number of distinctly different areas such as corridors, classrooms, washrooms, gymnasium, offices, etc… You can think of these areas as Zones with different purposes and as such you can set each unique area up as an individual Zone. As long as the number of Lights + Switches does not exceed 100, you can create one Zone. Areas that exceed 100 Lights + Switches can be subdivided into multiple Zones as necessary.

Below you can see an example of an elementary school with Zones identified by different colors. Each Zone would be programmed separately and given a unique name that would be used in the APP. As you consecutively program Zones you will build a library of QR Codes which will allow future access to either reprogram (Administrative) or adjust light levels or scenes (Secondary).



OVERVIEW: Simple Programming for Building Managers

SMART BLU™ was designed to make programming simple. To further your understanding prior to carrying out the task of programming, please see the following condensed overview of the process:



(1) Physical Lights are installed (2) A unique QR-Code is created for the Zone (3) Lights are wirelessly added to the SMART BLU™ APP on your smartphone and then placed into a Group (4). You can set automation including color, brightness, and motion and photo detector settings for the Group (5). If needed you can create customized Scenes (6). Switches may be added (7) to allow for Dim Up/Down, On/Off, Automation Enable, or Scene control. (8) After Zone programming is completed, a unique encrypted QR code is saved for later recall.

Short Cuts by Category

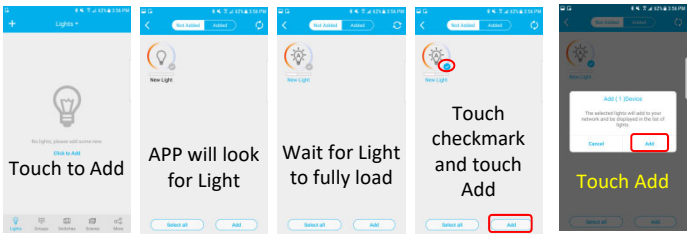
This section of the SMART BLU™ instruction manual offers quick programming sequences by application to get you going quickly without having to read the full manual. These have been broken down into, A. One Light/No Switch, B. Two plus Lights/No Switch, C. Two plus Lights & Switch, and D. Two plus Lights & Switch & Custom Scenes.

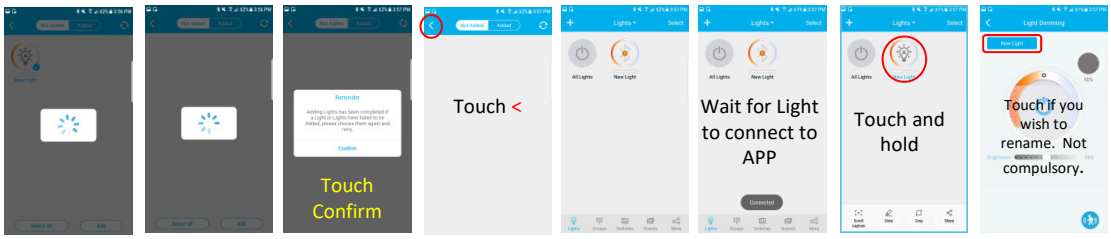
A. One Light / No Switch.

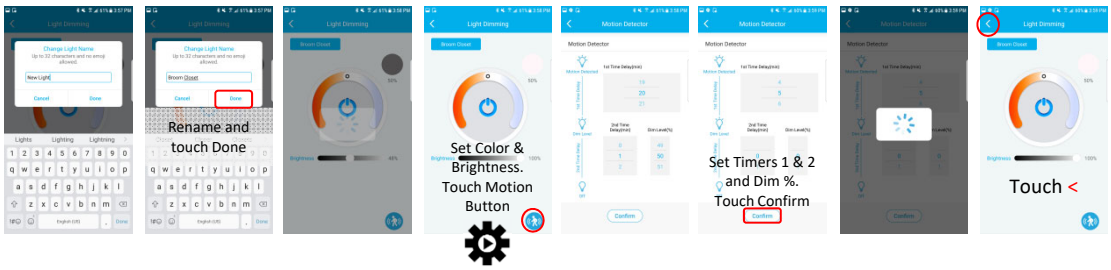
Applications: Broom Closet, Elect/Mech Room, Small Storage.

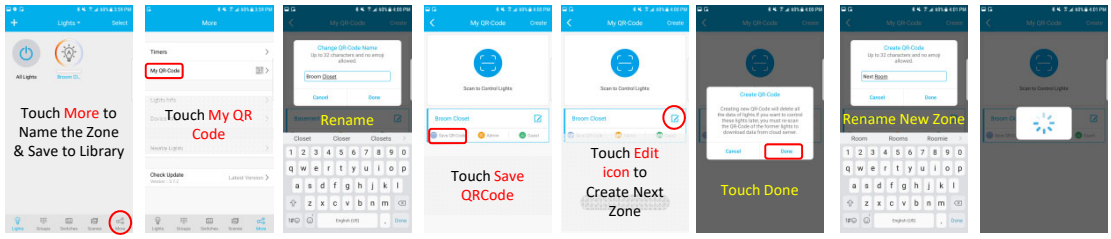
Install
Light and Power On

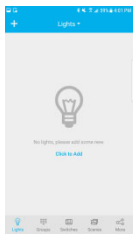
Open App











Ready to Add Light(s) in next Zone.

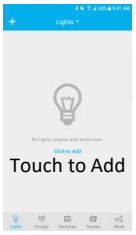
Short Cuts by Category - Continued

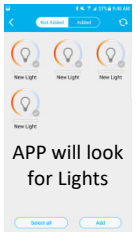
B. Two plus Lights / No Switch.

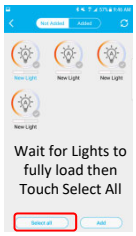
Applications: Storage, Electrical/Mechanical Rooms, Corridors, Common or Public Areas, Waiting Areas, Libraries Washrooms, Parking Garages, Stairwells, Retail Stores, Warehouses.

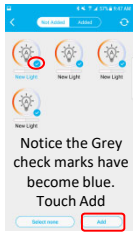
Install
Lights and Power On

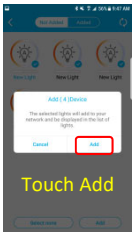
Open App

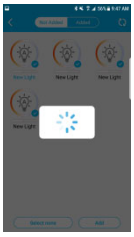


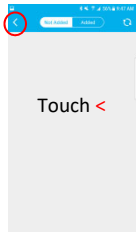


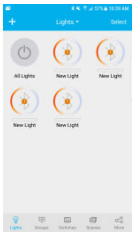


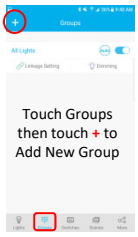


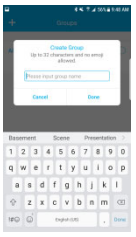


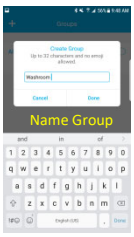


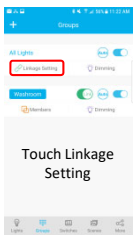


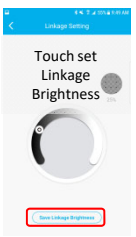


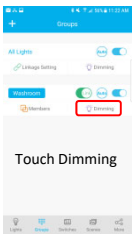


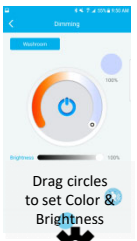


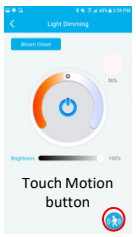


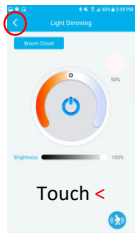


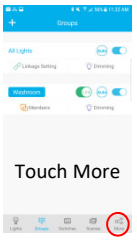


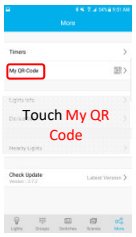


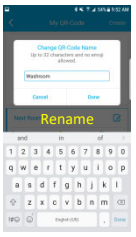


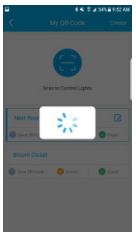


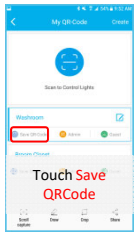


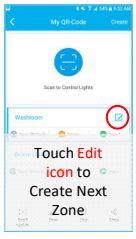


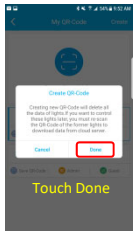


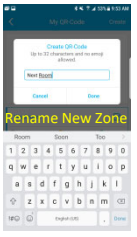


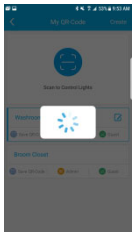


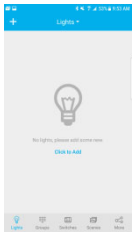










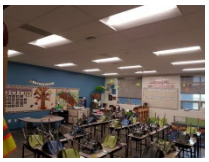


Ready to Add Light(s) in next Zone.

Short Cuts by Category - Continued

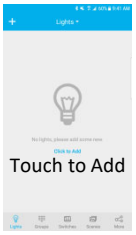
C. Two plus Lights & Switch.

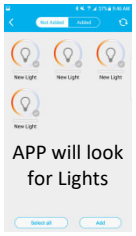
Applications: Classrooms, Gymnasiums, Offices, Meeting Rooms, Work Shops, etc…

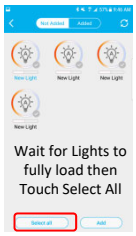


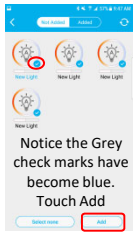
Install
Lights and Power On

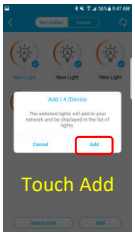
Open App

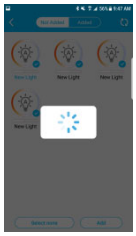


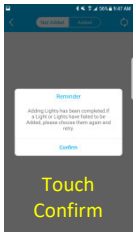


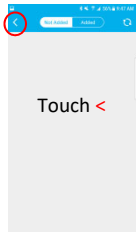


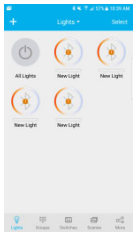


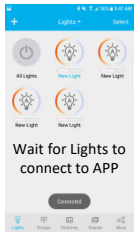


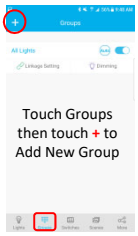


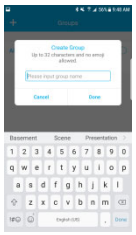


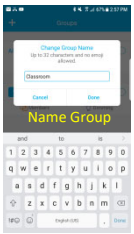


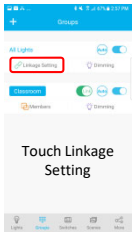


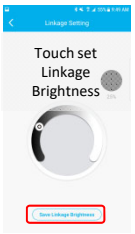


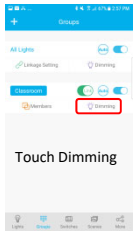


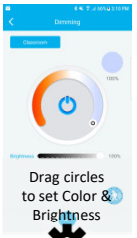


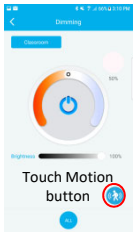


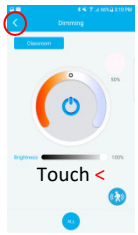


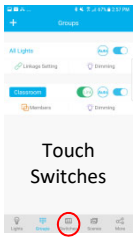


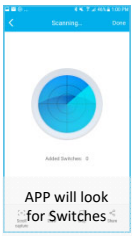


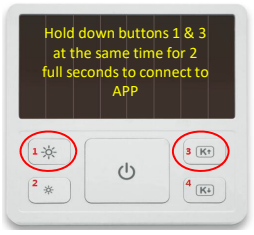


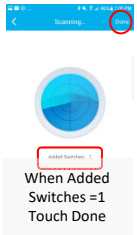


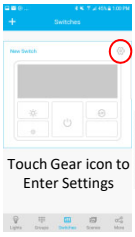


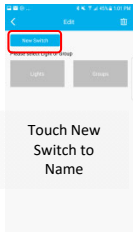


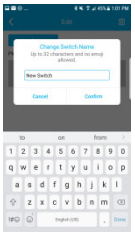


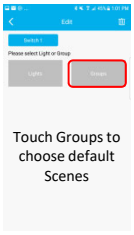








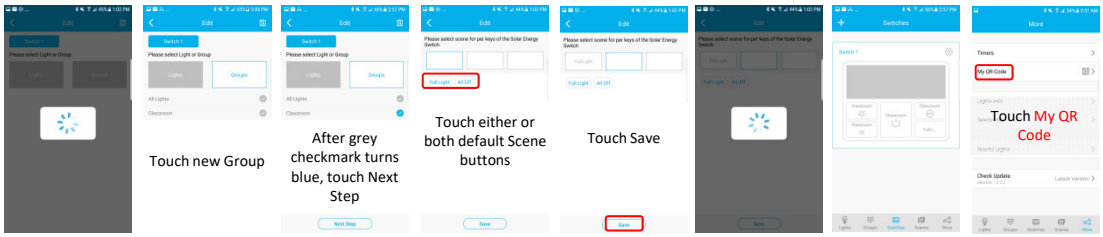




Short Cuts by Category - Continued

C. Two plus Lights & Switch.

Applications: Classrooms, Offices, Meeting Rooms,



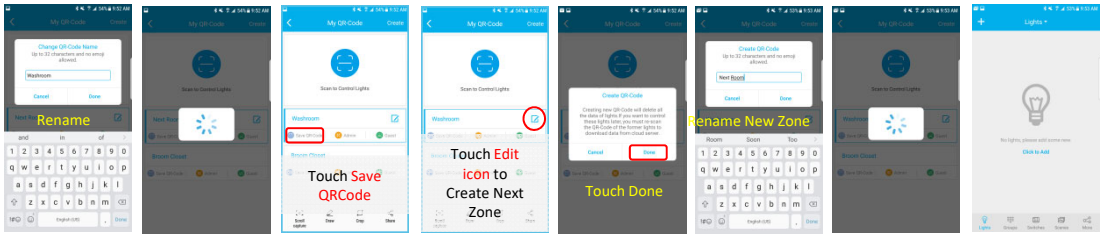
Touch new Group

After grey checkmark turns blue, touch Next Step

Touch either or both default Scene buttons

Touch Save

Touch My QR Code

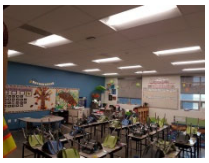


Ready to Add Light(s) in next Zone.

Short Cuts by Category - Continued

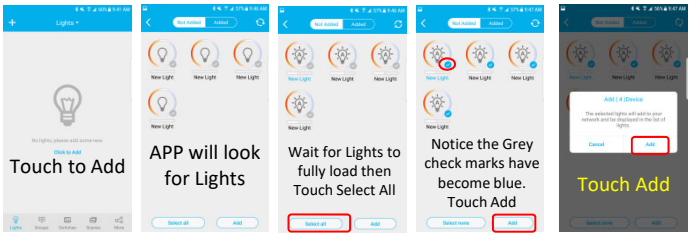
D. Two plus Lights & Switch & Custom Scenes.

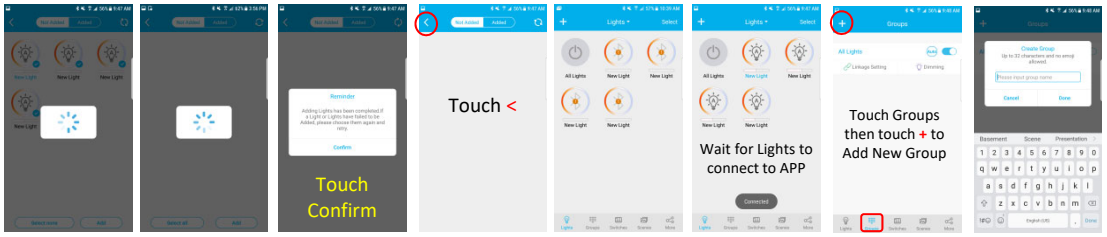
Applications: Lecture Theatres, Meeting Rooms, Drama Rooms, Classrooms, etc…

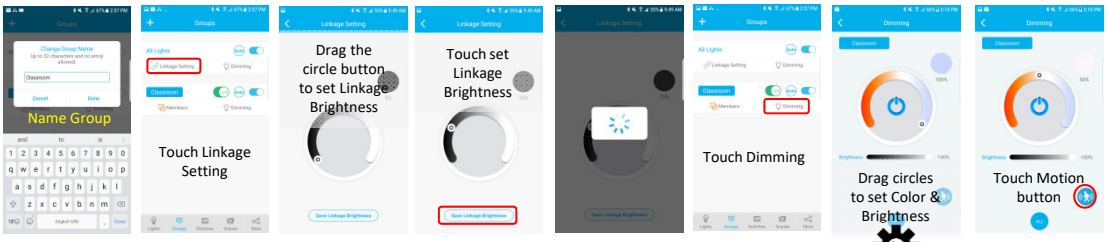


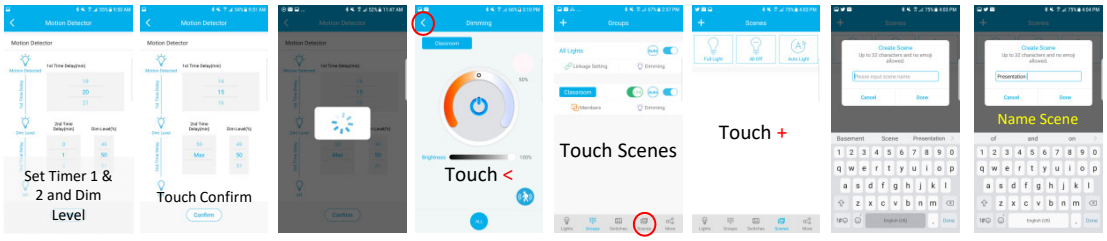
Install
Lights and Power On

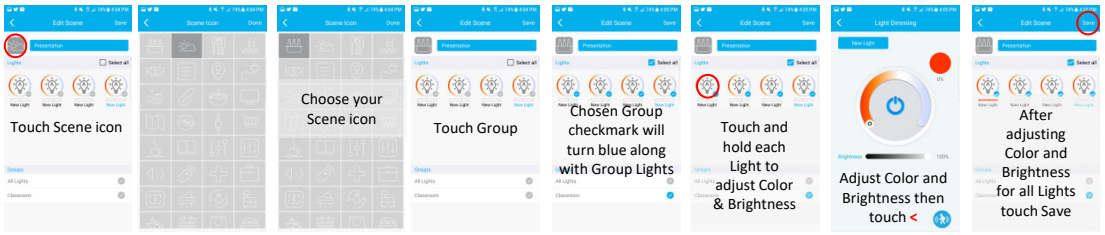
Open App







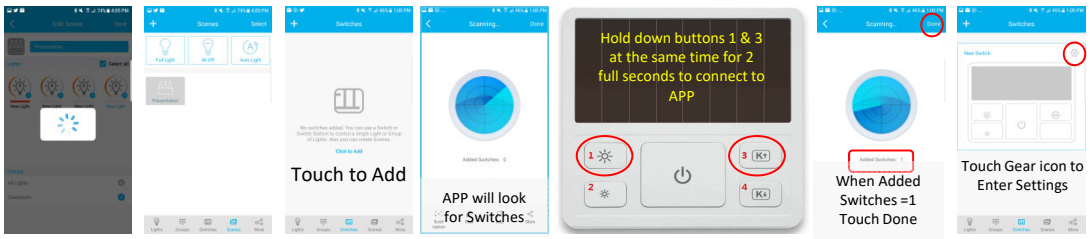


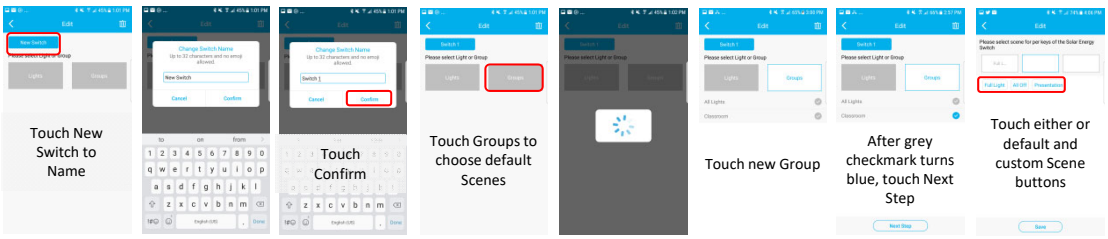


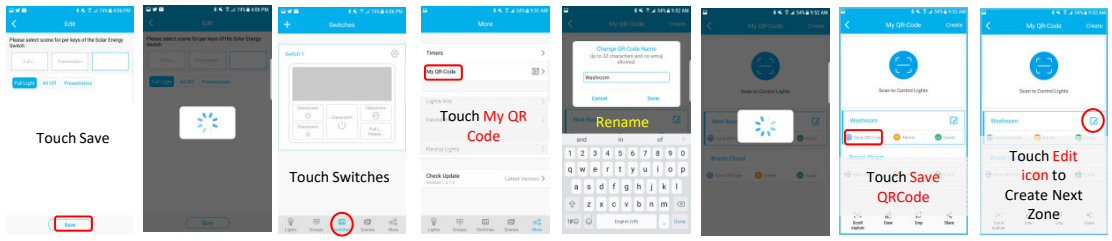
Short Cuts by Category - Continued

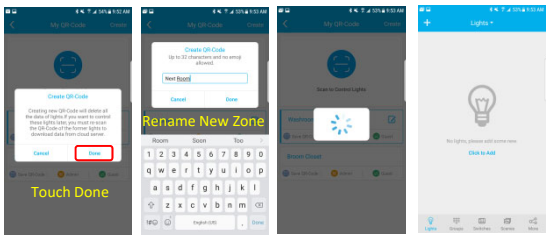
D. Two plus Lights & Switch & Custom Scenes.

Applications: Lecture Theatres, Meeting Rooms, Drama Rooms, Classrooms, etc…









Ready to Add Light(s) in next Zone.

2 Installation of APP

1. Installation of IOS APP

Start APP Store on your iOS (Apple) smartphone and search “J2 Light®” and select the “SMART BLU™” APP. Click to download and install.

2. Installation of Android APP

Scan (or long press and recognize) the QR code in the following picture with your Android smartphone.

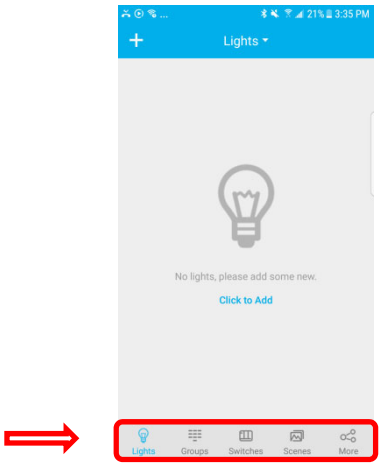
Return to desktop after installation and click the new icon to start the APP.

3 APP Functions

The SMART BLU™ APP communicates with Lights and Switches through the smartphone's Bluetooth® signals. You must turn on your smartphone's Bluetooth® function and grant Bluetooth® access to SMART BLU™ before using the APP.

1. Navigation of APP Function pages

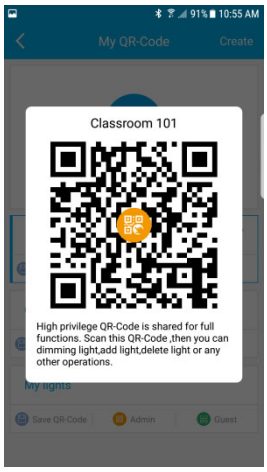
The functions of SMART BLU™ are divided into "Lights", "Groups", "Switches", "Scenes", and "More", categories. You may select each function by touching the icons on the menu bar at the bottom of the screen.

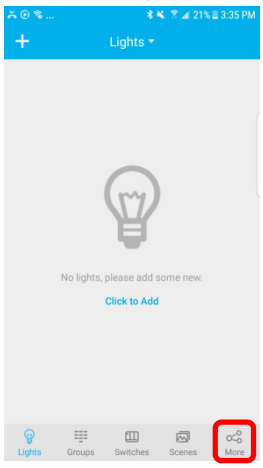


SMART BLU™ will enter the "Lights" function page by default after start up.

***** IMPORTANT FIRST STEP: CREATE UNIQUE QR-Code FOR YOUR ZONE BEFORE YOU START PROGRAMMING *****

A QR Code is a machine-readable code consisting of an array of black and white squares (see below left), typically used for storing URLs or other information for reading by the camera on a smartphone. Touch the More button on the bottom toolbar (below right) to access the main "More" page.





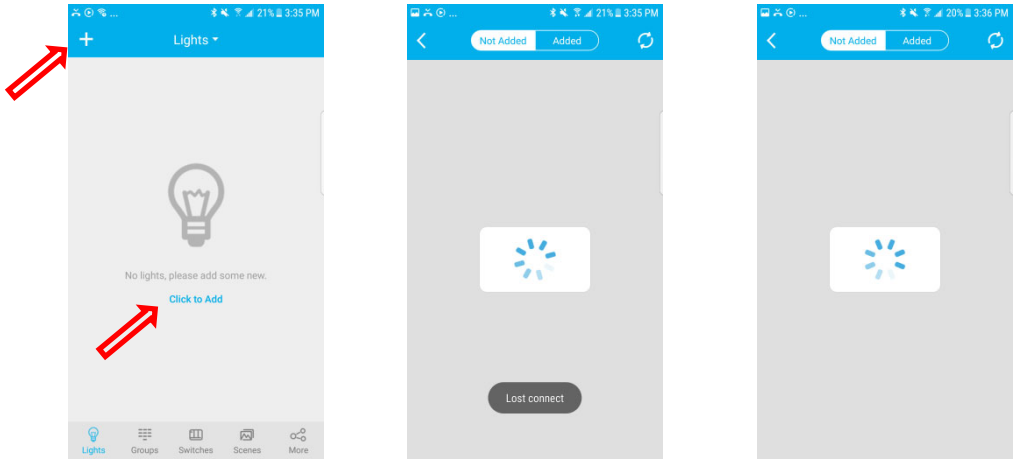
SMART BLU™ uses QR-Codes to save and access Zone programming information. Zones are described on page 11 in detail. In short, a Zone is an area within a building that may have a maximum of 100 (Lights + Switches) or less. A Zone could be as small as an Office or as large as a Warehouse. The first step to programming a Zone is to create a QR-Code. This is done by touching the "My QR-Code" bar in the main "More" page. This takes you to the main "My QR-Code" page. Touch "Create" and you will see a popup warning that creating a new QR-Code will delete any programming that has been done prior. If you have done programming but have not saved it, touch cancel and you may "Save" the data. The process of saving programming data will be discussed further on in this section.

If you have not started programming and are ready to "Create" a new QR-Code for your Zone, touch "Done" (below right).

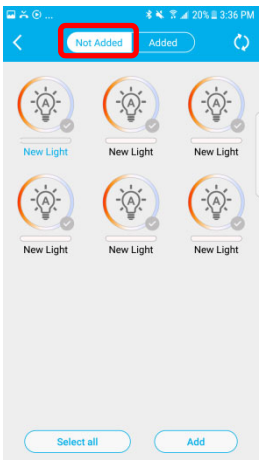
Lights

Programming a Zone begins at the “Lights” page. The Lights function is used to bring your physical Lights into the SMART BLU™ APP. You may program a small number of Lights here (ie. < 3) or you may program a Group of Lights in the Groups section which tends to be the most efficient method when you have > 2 Lights in a Zone. Automation defaults can be programmed in this section.

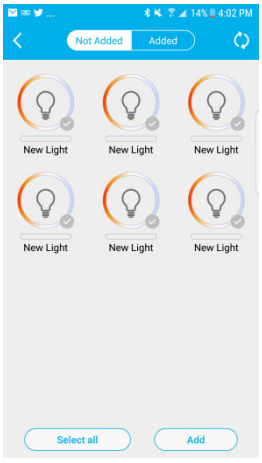
Dedicate ONE smartphone for adding Lights to Zones. Using more than one smartphone may cause unexpected results. To begin the process of adding Lights, please make sure that the Lights are connected to live power and are turned ON. Stand within range of the fixtures (ie. < 30ft radius). Depending on the strength of your phone’s Bluetooth signal and you battery level, you may have to stand closer. Click the “+” button on the upper left corner or “**Click to Add**” to add new lamps nearby (left picture below:.



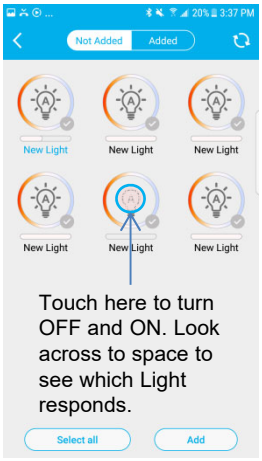
After clicking to add, you will be taken to a “Not Added” and “Added” screen (middle and right side picture above). A spinning circle tells you that the APP is trying to connect to all “Not Added” Lights that are within range. NOTE: give the APP ample time to find all of the fixtures within range (up to 30 seconds).



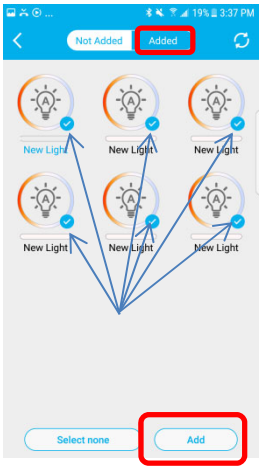
All Lights that have been found within range will be listed on the “Not Added” page. Lights that are “ON” will be listed as “New Lights” and will show bright Light Bulb icons. The letter A indicates that the Lights have automation sensors on board such as motion detectors and or photo sensors. If your physical Lights are ON but your listed “New Light” icons show plain Light Bulb icons as pictured to the right, you may have to wait until the APP loads their status. If the APP icons do not turn bright after a minute, try to load again.

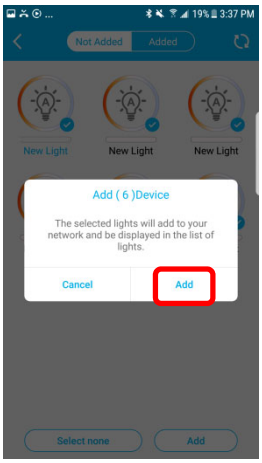


**Feature Upgrade* Lights are now given automatic unique I.D. numbers instead of “New Light” for all.*

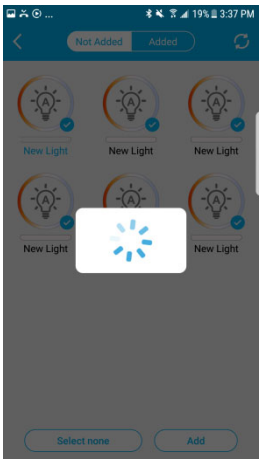


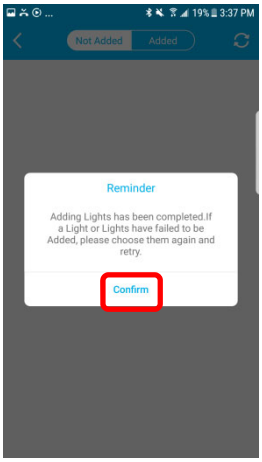
After your “New Lights” are listed and the bright Light Bulb icon is showing you may start the process of moving these over to the “Added” side of the APP where you can begin programming functions. By touching the icons in the middle of the circle you can turn your physical Lights OFF and ON to locate which ones you are actually adding. When you are satisfied with your choice, touch the grey circle with checkmark to select Light to be “Added” or you may simply choose Select all The grey circle will turn blue to let you know it’s been selected. Repeat for all Lights you wish to Add. On the right you can see that six “New Lights” have been chosen. Pressing “Add” moves them to the “Added” section while any Lights not selected will remain in the “Not Added” section.

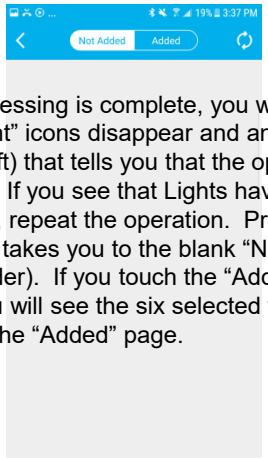




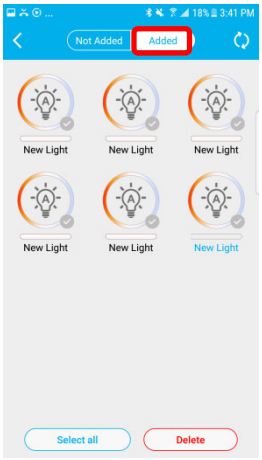
After pressing add (above right), you will see a popup (left) that tells you that the selected Lights will be added. You must press “Add” on the popup to continue or “Cancel” to return to the “Not Added” selection page. After pressing “Add” on the popup you will see a spinning circle (right) which means the request is being processed.

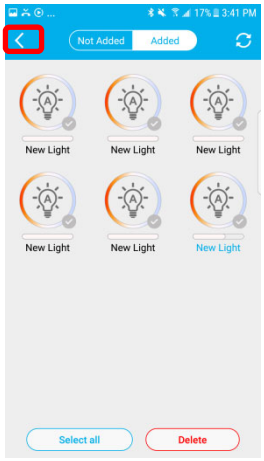




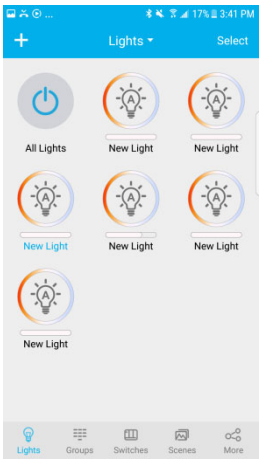


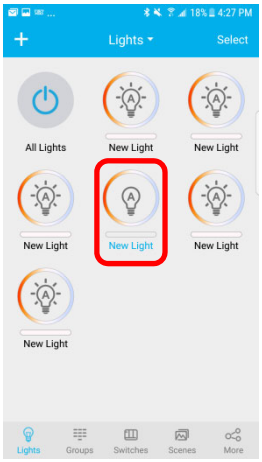
After processing is complete, you will see the “New Light” icons disappear and another popup (left) that tells you that the operation is complete. If you see that Lights have failed to be added, repeat the operation. Pressing “Confirm” takes you to the blank “Not Added” page (under). If you touch the “Added” tab (right) you will see the six selected fixtures listed on the “Added” page.



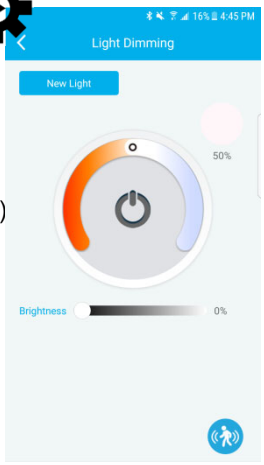


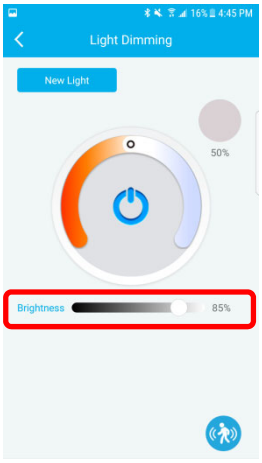
If you have mistakenly “Added” a “New Light” that you did not want, you may select it while in the “Added” page and delete. You are also given a convenient “Select All” button if you choose to delete all “New Lights” that have recently been “Added”. If you are satisfied with your selection you may move to the next step by touching the “<“ as seen highlighted (left). This takes you to the home “Lights” page (right). At this point you can turn “All Lights” OFF & ON. You may also turn individual Lights OFF & ON or if you press and hold, you may choose color, set a dim level or program the onboard motion detector.



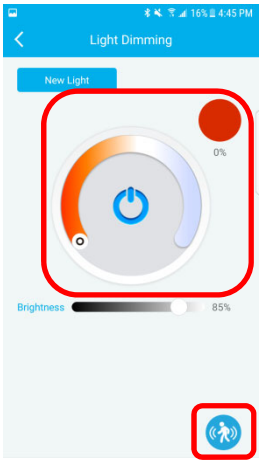


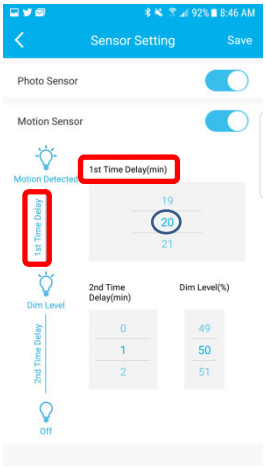
On the left you will see that the middle “New Light” icon was touched which turned the Light OFF. If you touch and hold the icon it will bring up the “Light Dimming” page (right) where you can affect various functions of the Light.



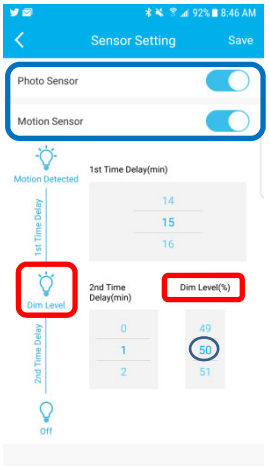


You can adjust the dim level of the Light by touching and dragging the white circle along the “Brightness” bar as seen to the left. As you drag the circle you will see the physical Light fixture dim up and down. If your Light is color tunable, you will be able to affect which color your physical Light fixture expresses by dragging the white circle around the color arc as seen to the right.
Touching the blue button on the bottom right (person with motion icon) will take you to the motion detector settings page.

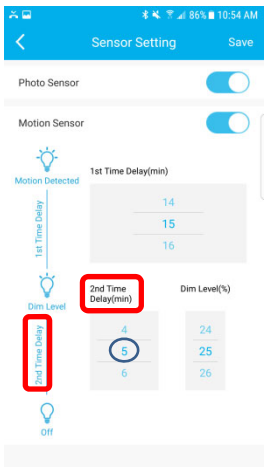




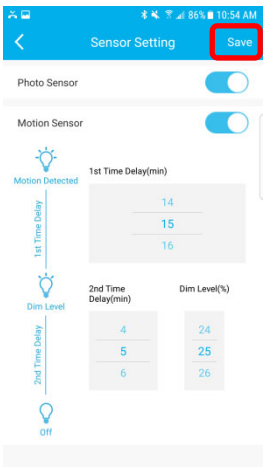
Three settings can be adjusted in the “Motion Detector” page (left). This refers to the sensor that is built into the individual Light fixture. When you move within a space and the Motion Detector sees your movement it will start the 1st Time Delay clock. If it sees your movement before the clock runs out, it resets the clock to start again. “1st Time Delay” is measured in Minutes. The default setting is 20 minutes (left). You can adjust the 1st Time Delay between 1 min to infinity (max) by touching the middle number (left circle) and dragging up or down. At right it has been set to 15 min. When the 1st Time Delay clock times out, the Light will Dim to a % (right) set between 0% to 100%.

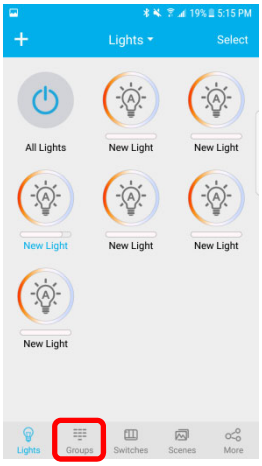


See important *Feature Upgrade* on page 25.



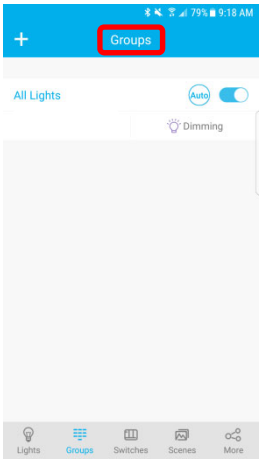
The Dim Level (%) is set by touching the middle number and dragging up or down. At top right it is set at 25%.
After the 1st Time Delay clock runs out and Light adjusts to the Dim Level (%), the 2nd Time Delay clock begins (left). The 2nd Time Delay is used to shut the Light OFF after the clock runs out. The 2nd Time Delay is set the same way the 1st Time Delay is set (from 0 to infinity (max). If motion is detected during the 2nd Time Delay, the 1st Time Delay clock will begin and Light will Dim up to it’s original level and the process will repeat. If the 2nd Time Delay clock runs out the Light will go OFF unless max was chosen. At left the 2nd Time Delay is set at 5 min. Touch “Save” (right) to save settings. This will take you back to the main “Lights” page.





You can repeat this process for each individual Light, or you can move to the Group section and program many Lights at the same time. Simply touch the “Groups” button on the bottom menu bar (left) and this will take you to the main “Groups” page (right).

The Groups functions are discussed in detail beginning on page 26.

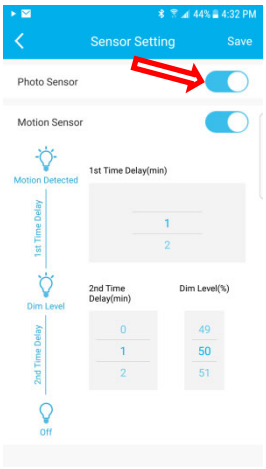


Feature Upgrade

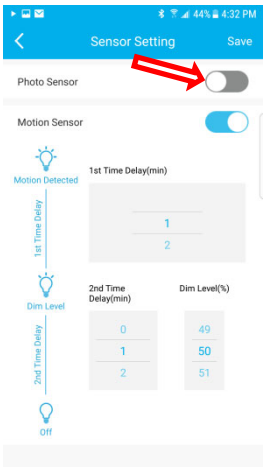
The "Motion Detector" page is now renamed "Sensor Setting". Two important functions have been added:

A. Photo Sensor "Enable/Disable" Toggle. The default setting is "Enable" which means the Photo Sensor input can be used to dim Light levels should there be significant influence from daylight through windows such as a classroom. If a space has no daylight or if the Photo Sensing option is found unnecessary it may be disabled and will not impact Light control.

Enable

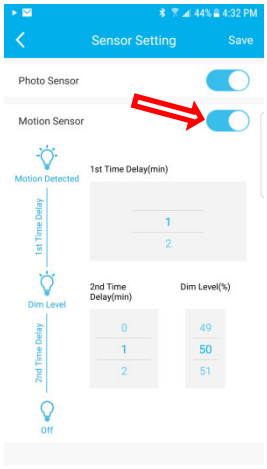


Disable

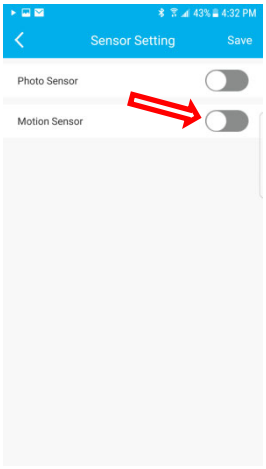


B. Motion Sensor "Enable/Disable" Toggle. The default setting is "Enable" which means the Motion Sensor input can be used to dim or turn OFF Lights in the prolonged <u>absence</u> of occupants. If Motion detection is not required it may be disabled. Notice that the page becomes empty as Motion sensor settings are no longer required when disabled.

Enable

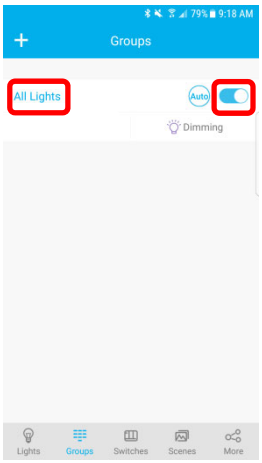


Disable



Groups

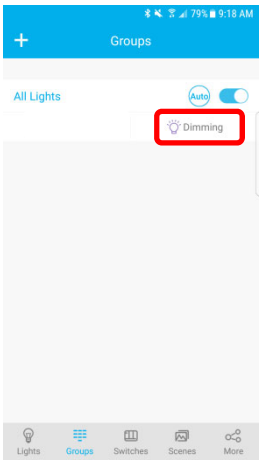
The Groups section is where you can efficiently program many Lights at the same time. As an example, consider a classroom or a gate at an airport. In the Groups section you may create a Classroom Group with all Lights to be programmed at once instead of one by one. Groups is also a place where you can set Automation defaults and have the Lights within the Group react dynamically to the environment and with one another.

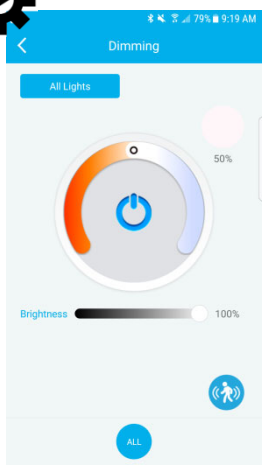


The “All Lights” default Group automatically includes ALL Lights that you have “Added” to the Zone. The purpose of the “All Lights” Group is for quick commissioning provided that you:

1. Need only one Group in the Zone,
2. Do not require a unique name for the Group,
3. Do not need the “Linkage” feature,

You can begin by toggling the “All Lights” Group Off and On by touching the button to confirm that you have “Added” all the Lights required. Touch the Dimming button to enter the Dimming page (bottom left).



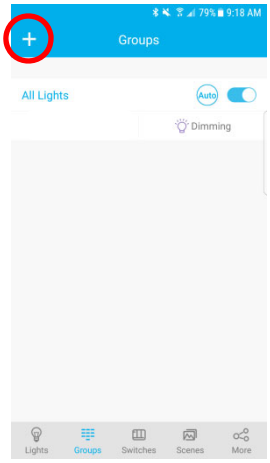


On the “All Lights” Dimming page you can set the same Light functions that were discussed on pages 23 & 24. The difference is that this allows you to program all the Lights in the Group at the same time. This includes “Brightness, Color Tuning, and setting the Motion Detector.

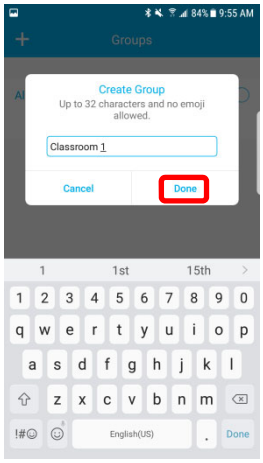
The “All Lights” default Group allows you to quickly set all functions with the exception of “Linkage”.

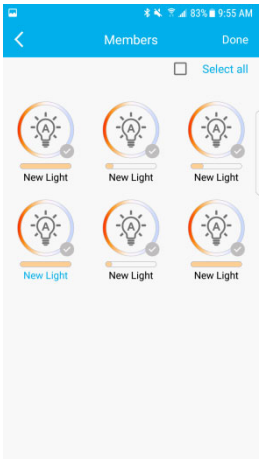
If you wish to:
1. Use the “Linkage” function for your Group,
2. Formally name the Group,
3. Add multiple Groups

You will need to touch the button to return to the main Groups page and add a new Group(s).

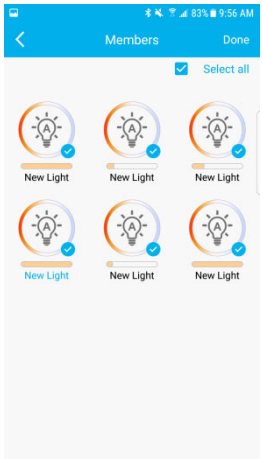


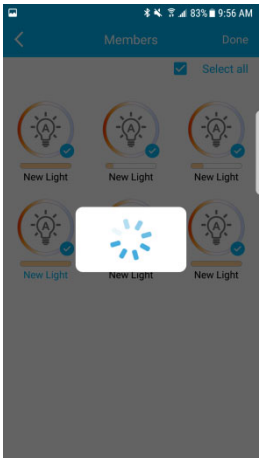
To add a new Group, touch the + button. This takes you to the “Create Group” popup (right). Enter a name for your Group and touch Done. This will take you to the “Members” page.





The “Members” page (left) allows you to choose which Lights you wish to bring into your new Group. You may touch the “Select all” box to highlight all of the Lights. Notice that the checkmark circles change from Grey to blue when highlighted (right). At this point you can touch “Done” or touch Light icons that you do not wish to have in the Group and their checkmark circles will turn back to grey.

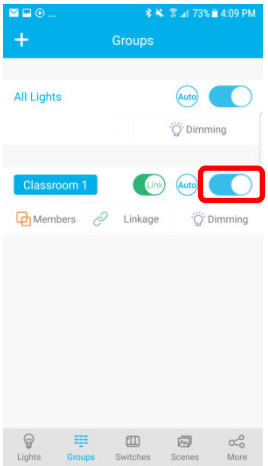


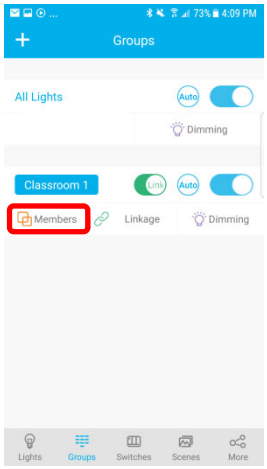


After your choices are final, touch “Done” and you will see the page go dark with the processing wheel spinning. Eventually you will notice that all of the physical Lights chosen will flash to show you they have been included in the new Group you have created.

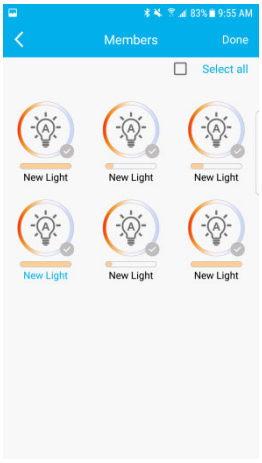
After completion you will be taken to the main Groups page and you should notice your new Group name (Classroom 1) in the list (right).

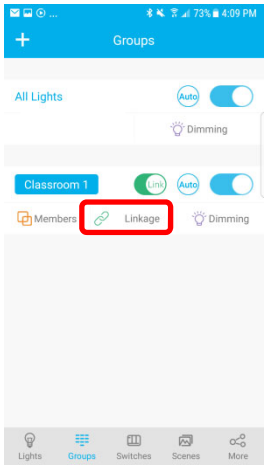
Touch the button for the new Group to toggle your lights off and on to confirm the Lights chosen are correct.



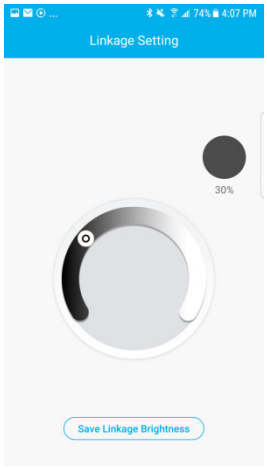


If you notice that a Light has not been included after toggling your physical Lights off and on or that a Light was included that you did not want, you may touch the Members button. This will take you to the "Members" page (right). Use the same procedure described on page 16 to include or preclude Lights in your new Group.



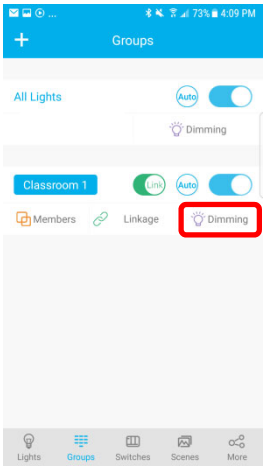


After completing the addition of the Lights to your new Group you may choose to program "Linkage". Linkage is best understood by example. Consider a room where Linkage is enabled. When you enter the room and the closest motion sensor sees you, all Lights that are in the Linkage Group will come on to a preset dim level. To set this level, touch the Linkage button. This will take you to the Linkage Setting page. Here you can set the Linkage Brightness by touching and dragging the white circle around an arc (right). The dim level is expressed both by color gradient and % in the upper right corner of the page.

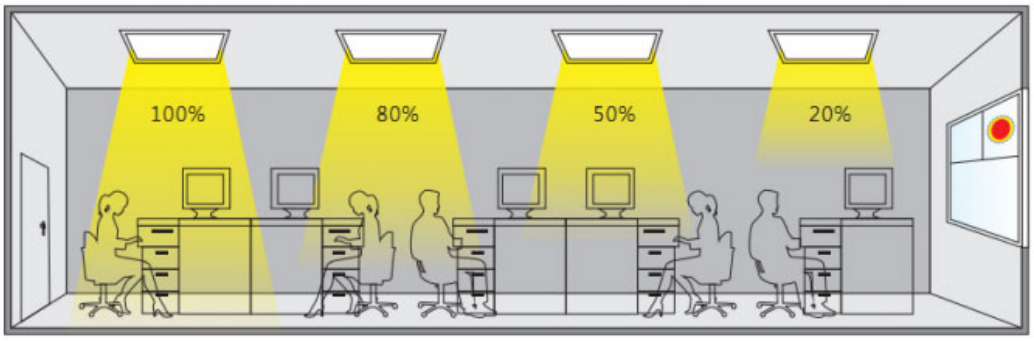


You should notice all Lights within the Group adjust to the Linkage Brightness you choose. After reaching the desired dim level, touch Save Linkage Brightness to set. This will take you back to the main Groups page.

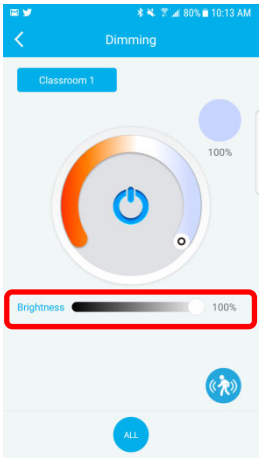
Next, touch Dimming to set the same functions previously noted on pages 23 & 24 of the "Lights" section. This time you are setting the functions for <u>all</u> Lights within the Group at the same time instead of individually.



Daylight Harvesting



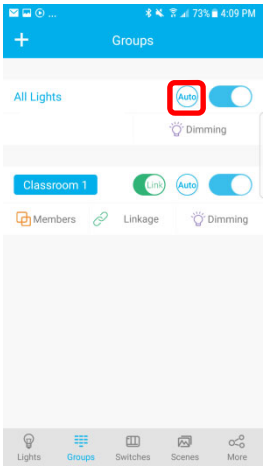
Daylight Harvesting is taking advantage of natural light that enters an interior space through windows by adjusting down artificial lighting to save power. The above graphic displays the concept whereby Lights closest to windows are dimmed down more than Lights further away from windows.



If your SMART BLU™ Lights have an onboard "Photo Sensor" you can take advantage of "Dynamic Daylight Harvesting". When enabled, each Light will automatically dim up and down to maintain light levels taken at time of programming.

It is therefore important to program at night in the absence of natural daylight such that full savings can be achieved. At the time you program Brightness is the time the Photo Sensor is establishing the light level it will seek to maintain afterwards. Lights will automatically dim as daylight enters the space. If you program during daylight hours your lights will only dim if daylight is higher than the moment when you set the Brightness level.

It may be possible that your interior space is within a larger interior space with artificial light entering through windows or skylights. If this is the case, take levels when either natural or artificial external lighting is at it's lowest. Also note that the "Photo Sensor" is mounted on the Light facing towards the floor. If there is an intermittent light that shines on the sensor it may affect proper function.



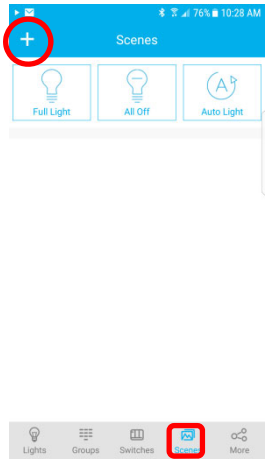
After setting the Dimming functions you may touch "Auto" to enable Automation. The Group sensors will be immediately activated and will dynamically adjust light levels based on your programming. If you do not touch "Auto" the Group sensors will not activate until motion is detected.

NOTE: The first time you enable the sensors you may notice the light levels bounce up an down a number of times. This means that your SMART BLU™ system is measuring the reflectivity of the surface it is looking at and taking it into account for accurate light level control. This may happen whenever the programming changes.

Scenes

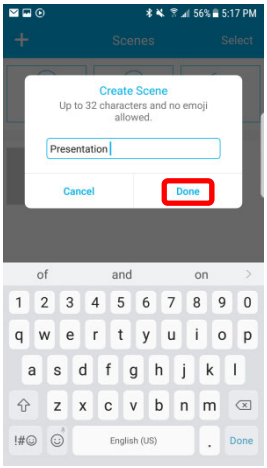
Scenes are created and used to customize light levels for special events such that they may be easily called upon by a single button press on a Switch or the SMART BLU™ APP. A common example would be a presentation Scene with a speaker and a screen or whiteboard. You may wish to drop the light levels for the Lights surrounding the screen, keep light levels high where the speaker is standing and drop light levels for the audience. This can be accomplished easily on the Scenes page.

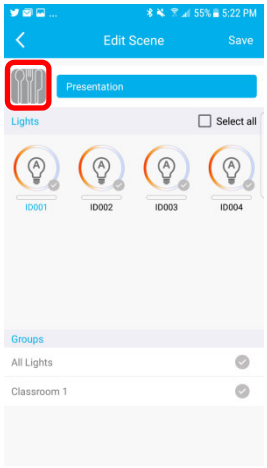
When Scenes are selected, Lights will stay at the Scene settings until every Motion Detector timer T1 & T2 for every Light has timed out (see page 16). After such time has elapsed the Lights will revert to back to the automated default light levels and Motion & Photo detector settings. Put another way, when you select a Scene, the Motion Detector remains active but does not dim the Lights when time T1 elapses. Only when T1 & T2 elapse will automation return.



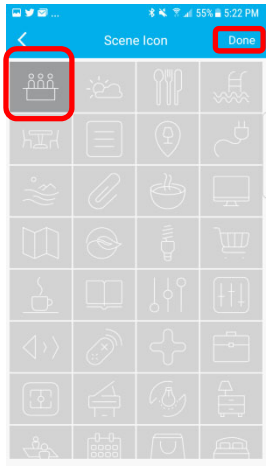
Touching the Scenes button on the bottom menu bar takes you to the main Scenes page (left). You will see three default Scenes at the top of the page “Full Light”, “All Off”, and “Auto Light”. The default Scenes are Full Light (100% light level for all Lights), All Off (0% light level for all Lights), and Auto Light (returns Lights to Automation mode and programmed light levels).

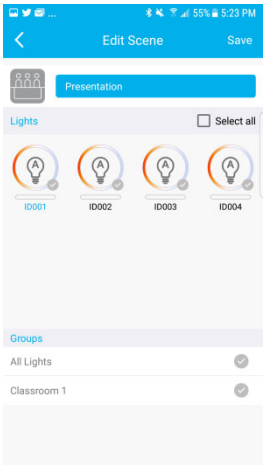
Touching + opens the “Create Scene” popup where you can name your new Scene (right). Touch Done after entering your Scene name and you will be taken to the “Edit Scene” page (below left).





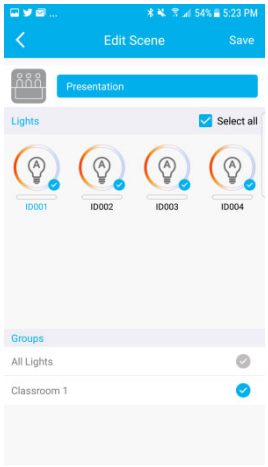
Touching the top left icon takes you to the “Scene Icon” page (right) where you may choose an icon that best represents your Scene. After choosing your icon, touch Done. and you will be brought back to the “Edit Scene” page where you should notice that the icon has been replaced with the new icon you chose.





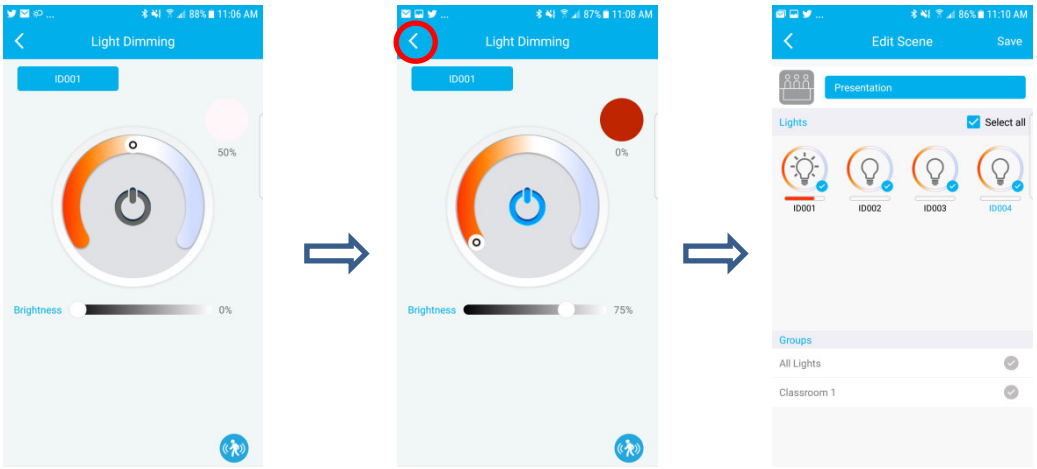
After naming your Scene and choosing an icon you can now choose the Lights you wish to program for your Scene. You may do this multiple ways:

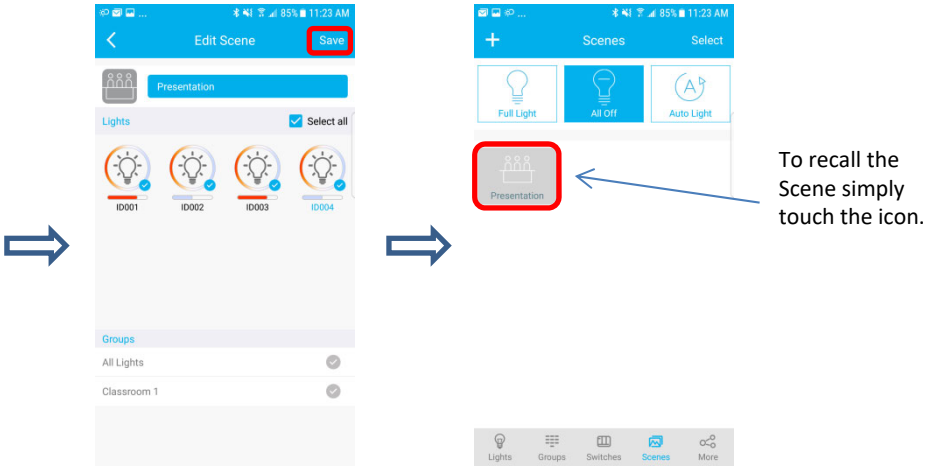
1. You may choose Lights individually by touching the grey checkmark of the Lights you want. These will then turn into blue checkmarks to indicate they have been chosen.
2. Touching the "Select all" box selects all of the Lights available.
3. Touching a "Group" will select all Lights within the Group.



There are **two** ways to set up your Scene.

1. Individually adjust the Color and Brightness of every Light in the Scene. Simply touch and hold the Light icons one by one to open the "Light Dimming" page (below left). You may set the Color and Brightness as previously explained on page 23. You will see the physical Light change to your settings. When you are done, touch and you will be take back to the "Edit Scene" page where you may repeat the procedure for all remaining Lights until you have completed the full Scene. Touch "Save" and you are done.

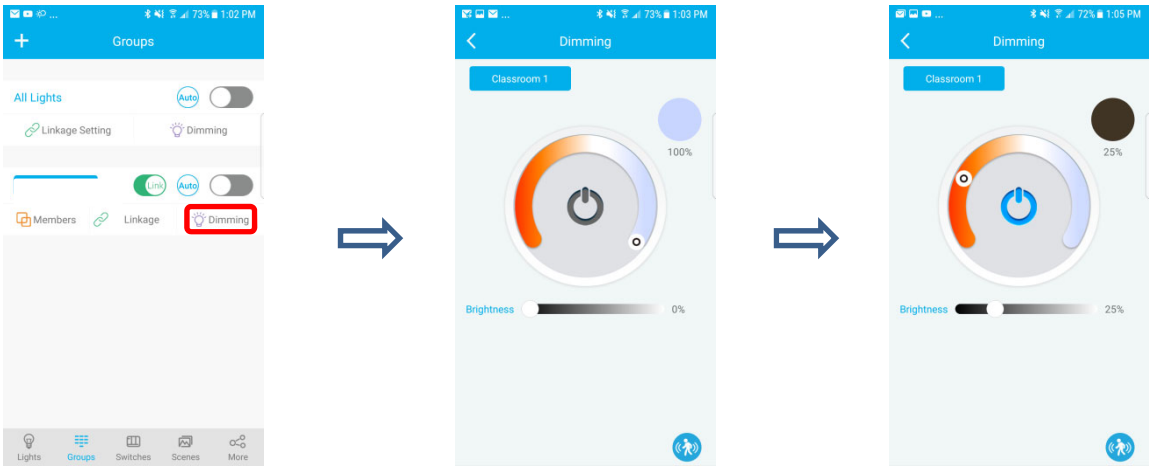




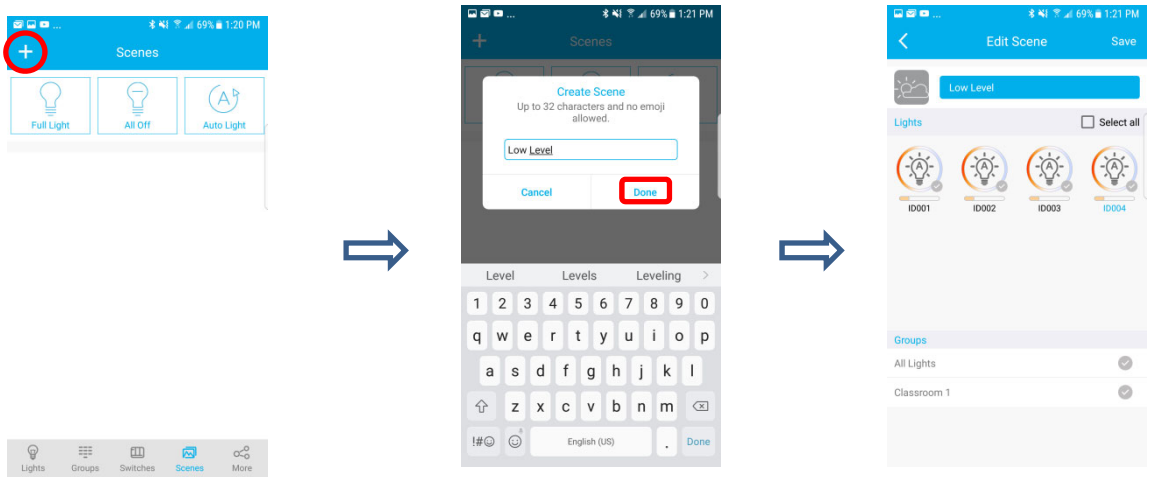
To recall the Scene simply touch the icon.

Setting Scenes by individually adjusting every Light is okay for doing small rooms with fewer lights but is very inefficient for creating Scenes for large rooms with many lights. The strategy below is meant for this scenario.

2. Set the majority of Lights all at once in Groups prior to programming Scenes. As an example, consider that you wish to set a 25% low light level with 25% color for a Classroom. Start at the Groups page (see page 26 for instructions) and touch Dimming. This takes you to the "Dimming" page where you can adjust Color and Brightness for all Lights in the Group at once. After completion touch < to return to the main Group page and then Scenes.



From the main Scene page touch + to "Create Scene" and add the name you wish to use. Touch Done and you will notice that the Lights on the "Edit Scene" page are already set to the levels you had changed in Groups above. Most of the work is done and this represents a quick way to create a new Scene. You may still adjust one or more of the Lights and the icon as needed. Remember to touch "Select all" and "Save" at the end to complete your Scene. You may repeat this process for multiple Scenes.



NOTE 1: Changing the Color and Brightness in the Group section sets the levels expressed when SMART BLU is in AUTO mode. After you have created all Scenes, you will need to go back to the Group section to set the AUTO Color and Brightness.

NOTE 2: When you choose a Scene, the physical Lights will express the levels you set until the last motion detector in the Group times out after which the Lights will return to AUTO function.

If you have created a Scene that you no longer want you may delete it. If you have associated the Scene with Switches and/of Timers it is recommended that you delete them prior to deleting the Scene.

Deleting Scenes is a simple process. While on the main Scenes page touch “Select”. This will bring up a grey check mark on the bottom right corner of the available Scenes. Touch the check mark to select the Scene and you will see the check mark turn blue to indicate your selection. Touch “Delete” to delete the selected Scene. This will bring a popup warning that tells you that any Switches and/or Timers that had been programmed to select this Scene will lose this function. To proceed touch “Delete” and this will bring up the processing wheel. You will also notice your physical Lights will blink to suggest that processing is complete and the Scene will be eliminated from the main Scenes page.

Switches

Currently SMART BLU™ offers one style of wireless Switch called the “Solar Switch” as seen below left. The Solar Switch has five function buttons. When enough light energy is present, the Solar Switch will use ambient light to power the function buttons. If there is not enough light energy present, the Solar Switch uses power from a replaceable 2032 Pile Battery located on the back of the Solar Switch. Switch functions are as follows:

Button **1** : Dim Up. Whether in “Auto” or “Scene”, the Dim Up button will raise light levels as you hold down or consecutively press. ***Note that adjusting levels while in Auto will reset the top end brightness. Adjusting levels while in Scene will only be temporary.***

Button **2** : Dim Down. Whether in “Auto” or “Scene”, the Dim Down button will lower light levels as you hold down or consecutively press. ***Note that adjusting levels while in Auto will reset the top end brightness. Adjusting levels while in Scene will only be temporary.***

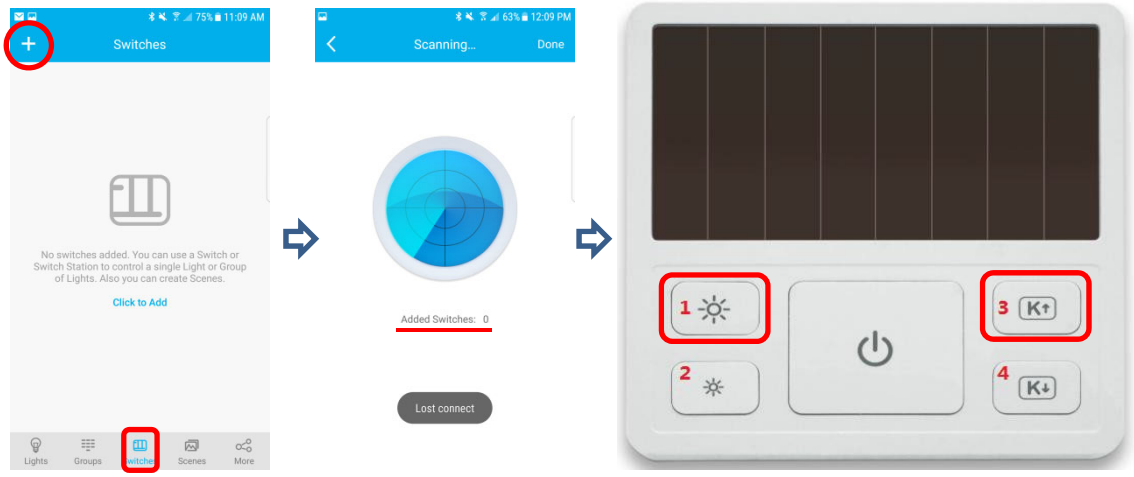
Button **3** : Auto. Pressing the Auto button will return the Lights to the top brightness level of the Auto default settings. Lights will express the automation you have programmed. Motion and Photo Sensors will be active if enabled.

Button **4** : Scene(s). You may program up to three Scenes for this button. Pressing the button repeatedly will toggle each Scene in sequence. A Scene will be expressed by your Lights for as long as any motion has been detected by any Light within the Scene. When the area has been unoccupied and Time Delays 1 & 2 (described on page 24) have timed out, Lights will go OFF or to bottom level and will return to Auto.

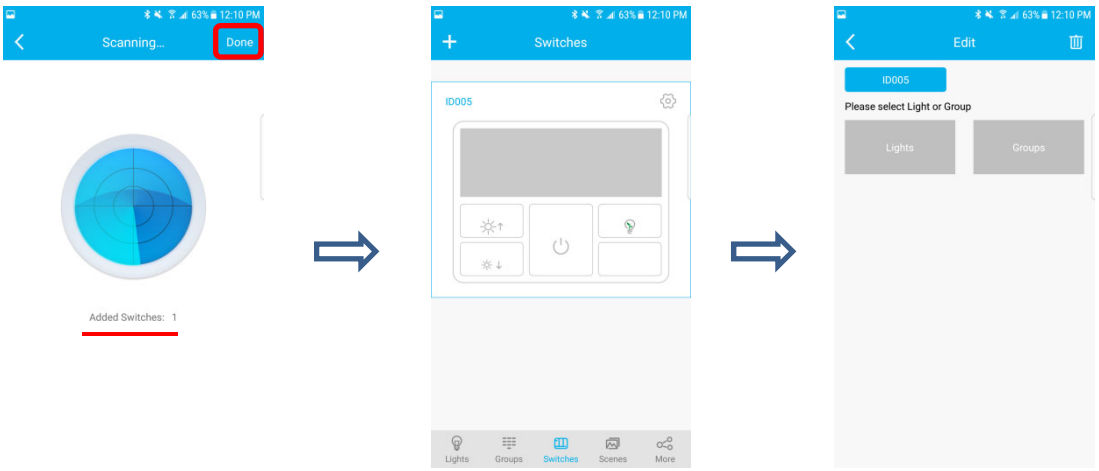
Button : On/Off. Pressing this button once raises the brightness level to 100% whether you are in Auto or Scene mode. The 100% On function acts like a Scene where the brightness level will be kept at 100% until both Time Delays 1 & 2 have timed out. When you press this button again, Lights will be shut Off completely and will stay Off until they are either manually turned On or a programmed Timer turns them On.

Switches

To program the “Solar Switch” you will need to touch the Switches button on the menu bar to enter the main Switches page. Before you touch + or “Click to Add” have your Solar Switch close to your smartphone to add to the APP. When you touch “Click to Add” you will be taken to the “Scanning” page where you will see a line moving around a circle much like a second hand on a clock (below middle). The APP is actively looking for a physical Switch to pair with. At this point while you hold the Switch close to your smartphone, hold down the **1** and **3** buttons (below right) for three seconds and let go.

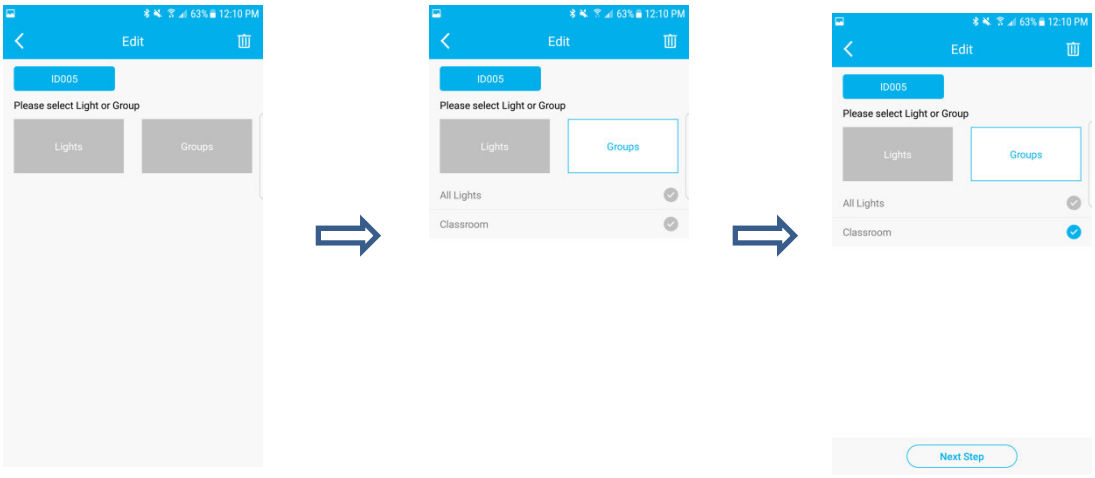


Within 10 seconds you should see the “Added Switches: 0” change to “Added Switches: 1” (below left). Touch “Done” and this will take you back to the main “Switches” page where it will now show a graphic of the Switch you have added along with an automatic identifier (below center “ID005”). Touch ⚙ to enter the “Edit” page. At this point you may choose to rename the Switch by touching the “ID” number.

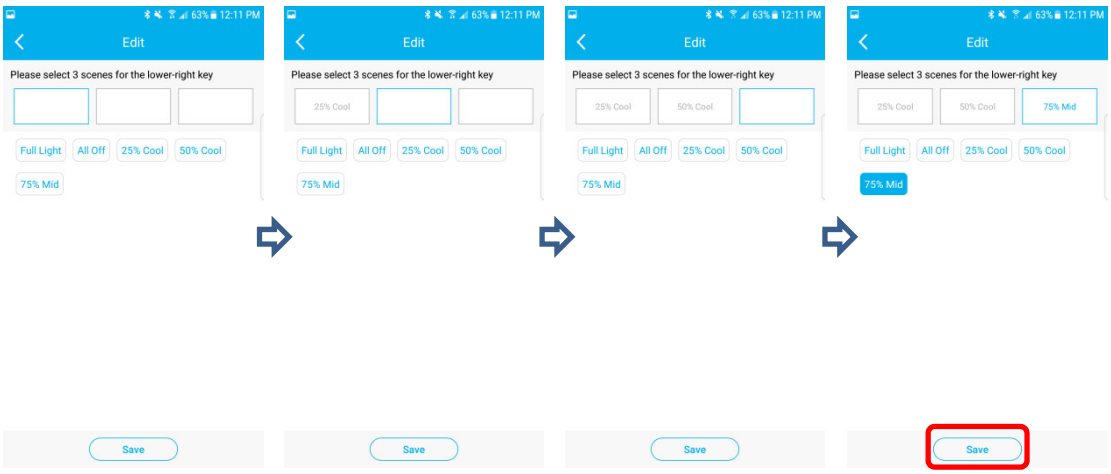


Switches

After choosing your Switch ID or name you may then choose to Select by “Lights” or by “Groups”. If you choose “Groups” the Edit page will show you a listing of Groups to choose from with grey checkmark circles (below center). Touching the Group of your choice will highight the checkmark circle blue. At this point you may touch “Next Step” to enter the Scene choice page.

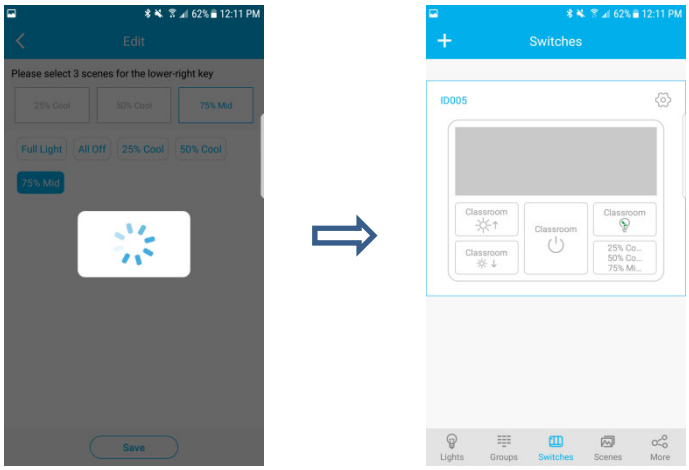


The Scene choice page will display two default Scenes: “Full Light” and “All Off” which mimic the functions of the On/Off button. The other choices listed are all of the Scenes you have previously programmed. Button **4** on the Solar Switch allows for three Scenes to be toggled with successive button presses. These are represented by three empty rectangles. Choosing a rectangle will turn the outline from grey to blue. Touching a Scene choice then places the Scene title in the rectangle and it turns grey while the next rectangle in the sequence turns blue until you are finished choosing. This is shown below. When you are finished touch “Save”.



Switches

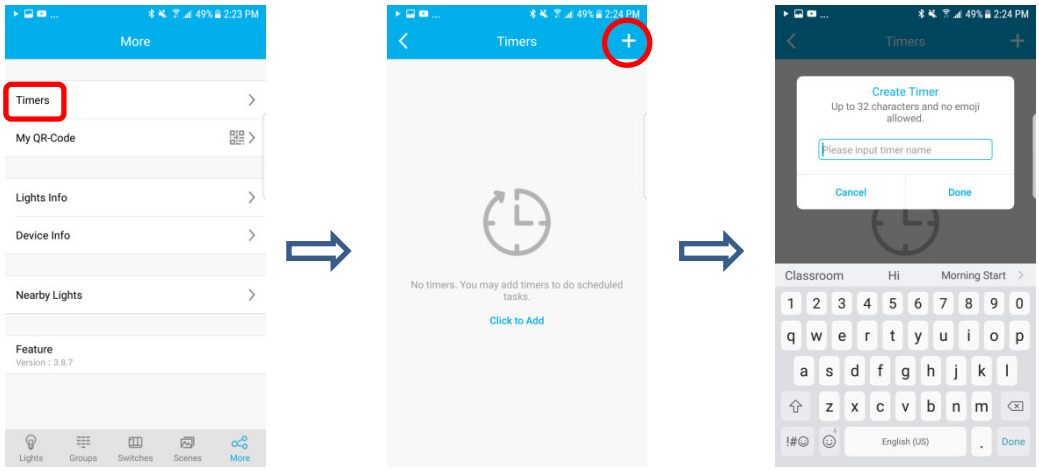
After touching “Save” the processing wheel appears and the physical Lights will blink to show that they have accepted the Switch programming. You are then returned to the main “Switches” page and are shown a representation of your Solar Switch with the Group name showing on buttons **1**, **2**, **3**, & ⏻ . Button **4** displays all of the Scene names chosen. For a fee, your physical Solar Switches may be silkscreened to represent the same graphics as your virtual Switch. Also note that your virtual Switch buttons can be used the same way your physical Switch buttons are used.



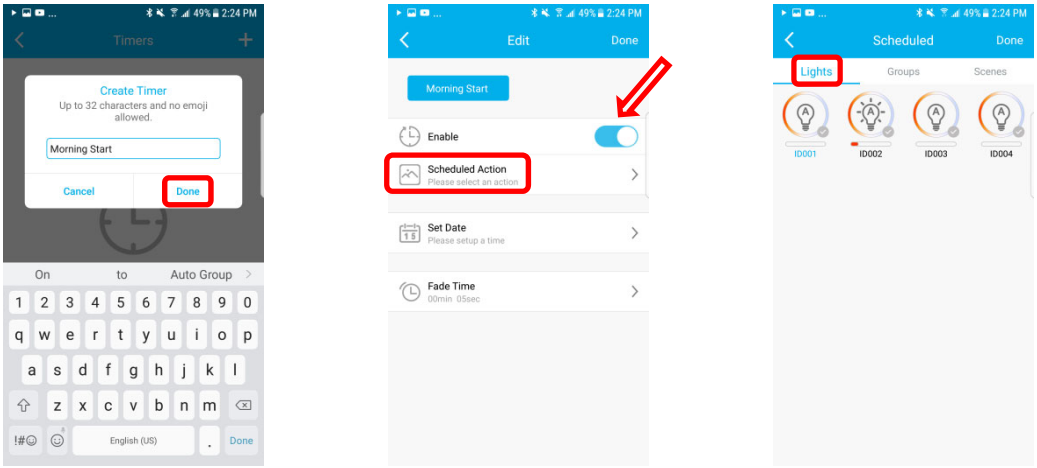
Timers - Lights

The “More” page is accessible by touching the More button on the bottom menu bar. In this section you may set Timers and save QR-Codes for each zone that you program. It also offers information that may be used to communicate with J2 Light Inc. should any system issues arise.

You may wish to create a Timer for various reasons such as to turn on hallway lights in the morning or security lighting in the evening. Touching the “Timers” bar takes you to the main “Timers” page (below left). Here you may touch + or “Click to Add” to create a new Timer (below center). This will take you to the “Create Timer” popup where you may name your Timer (below right).



Enter the name you wish to use for your timer and touch “Done” (below left). This will take you to the “Edit” page where you should see the name of your Timer in the top left title bar. There is a toggle button which allows you to Enable or Disable the Timer (below center). To “Enable” means the Timer will be active. The next step is to touch Scheduled Action. This takes you to the main “Scheduled” page where you have a choice to create a Schedule for an individual Light, a Group of Lights, or a Scene of Lights. The default page choice tab is set Lights (below right). Here Lights are presented with grey checkmark circles. Touch the circle of the individual Light you wish to Schedule and the checkmark circle will become blue to represent your choice.

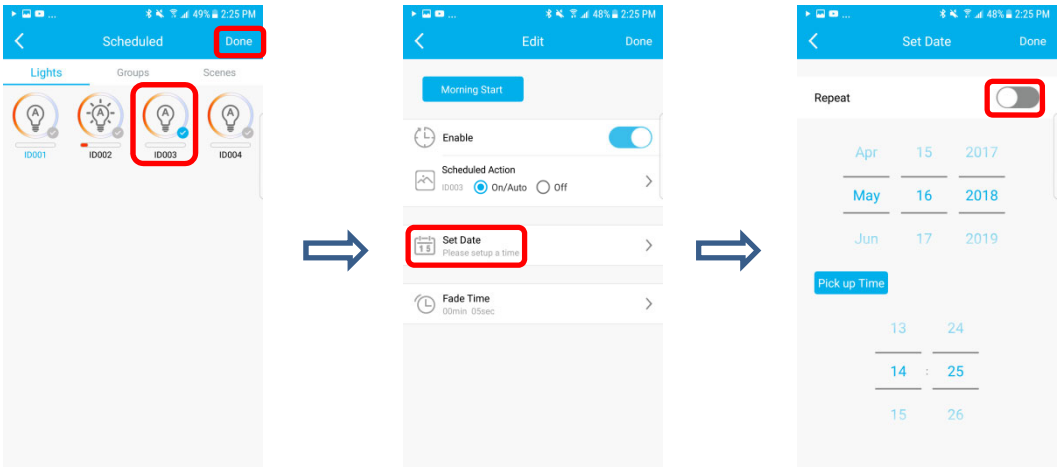


Timers - Lights

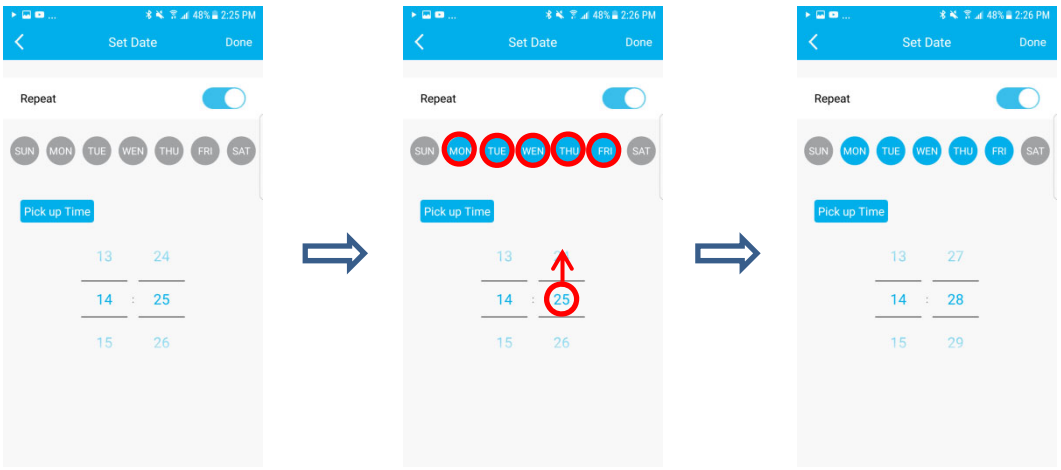
After touching your Light choice you will notice the grey checkmark circle turn blue (below left). Touch “Done” after your selection to enter the “Edit” page. Here you may set your “Scheduled Action”. The choices are:

“On/Auto” = Enables Auto mode and raises light level to top Auto default brightness and color.
“Off” = Disables Auto mode and lowers the light level to 0%.

Touch the “Scheduled Action” button of your choice. (On is chosen below center). Next, touch “Set Date” to open the main “Set Date” page. Here you may touch the “Repeat” toggle to reveal the days of the week should you wish to repeat the action. If not, leave “Disabled”.



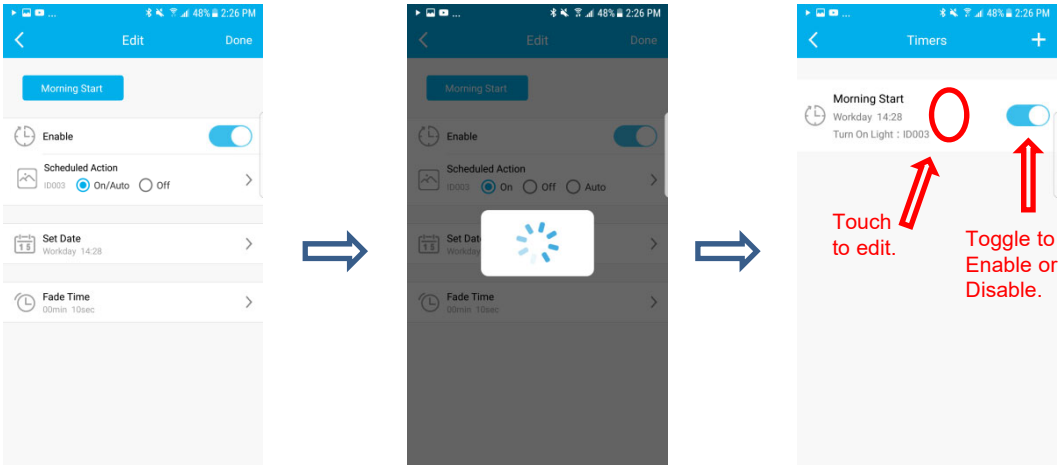
Touch the grey circles of the days of the week you wish to repeat the “Scheduled Action”. Your choices will become blue circles (below center). Next you may choose the “Pick Up Time” which is when the “Scheduled Action” is to occur. Note that the time is represented as a 24 hour clock similar to military time. Set the time by touching and dragging the dark hour or minute number wheel up an down. ie. The time 14:28 was set by touching the minute number “25” and dragging upward until the number “28” appeared. You may spin the wheel quickly or slowly and you may also stop it by touching and holding still. After completion, touch “Done” to return to main “Edit” page.



Timers - Lights

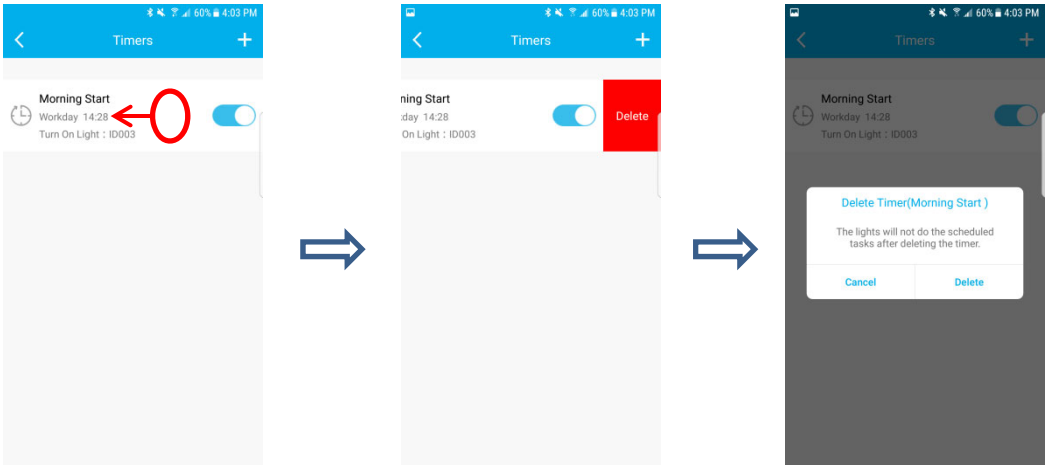
The last function to set for your Timer is the “Fade Time”. This is the amount of time SMART BLU™ will take to execute the “Scheduled Action” starting from the “Pick Up Time”. Touch “Fade Time” to enter the main “Fade Time” page. Here you may set the Fade Time by touching and dragging the minute and second time wheels up and down. The default Fade Time is 5 seconds. Below right the Fade Time has been set to 10 seconds. After setting your Fade Time touch “Done” to return to the main “Edit” page.

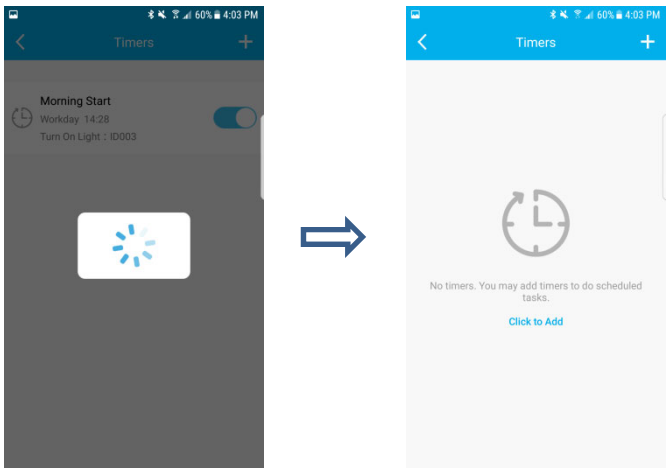
After making all of your function selections for your Timer, you should notice that they are all represented on the main “Edit” page (below left). If something is incorrect you may go back and change as necessary. If you are satisfied with your choices and they are represented accurately on the main “Edit” page you may touch “Done”. A processing wheel will appear (below center) and your chosen physical Light will blink to acknowledge acceptance. This will take you back to the main “Timers” page (below right) where your new Timer will appear listed. You may create more Timers which will be listed and you can touch the Enable/Disable toggle to have them active or suppressed. If you wish to edit your Timer, simply touch the Timer and it will take you back to the main “Edit” page.



Timers – Delete

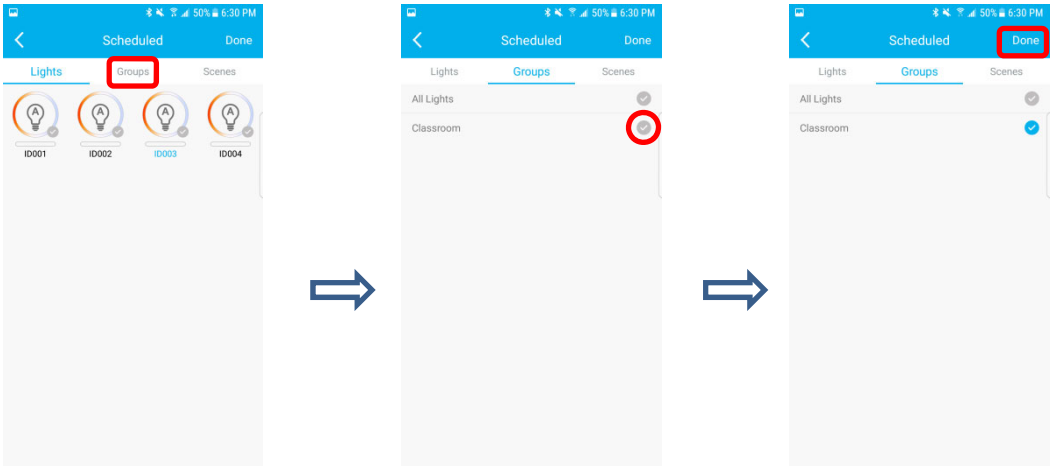
If you wish to delete a listed Timer, touch and drag the Timer bar to the left to expose the “Delete” tab. Touch “Delete” and you will see a popup warning. Touch “Delete” on the popup and you will see the processing wheel and the physical Light(s) associated with the Timer will blink their acceptance. After processing is complete, you will be brought back to the main “Timers” page and you should notice that your Timer has been removed.

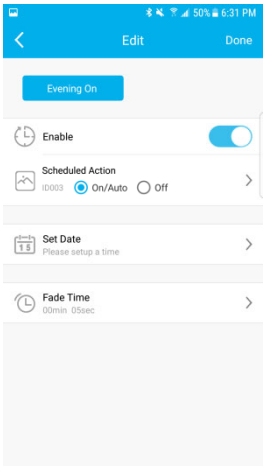




Timers - Groups

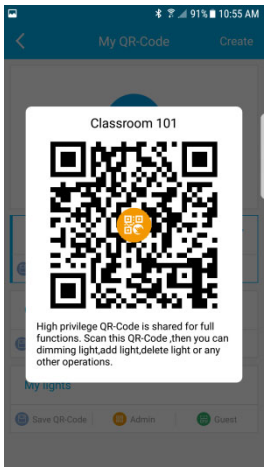
The process for setting a Timer for Groups is very similar to Lights. At the main “Scheduled” page you touch the “Groups” tab. This takes you to the main “Groups” page where you may choose a Group by touching the grey checkmark circle. The circle turns blue to indicate that it has been selected. Touch “Done” and you are taken to the main “Edit” page to continue programming the Timer as explained in pages 38 – 40.

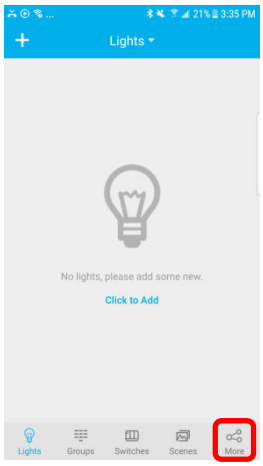




*** IMPORTANT FIRST STEP: CREATE UNIQUE QR-Code FOR YOUR ZONE BEFORE YOU START PROGRAMMING ***

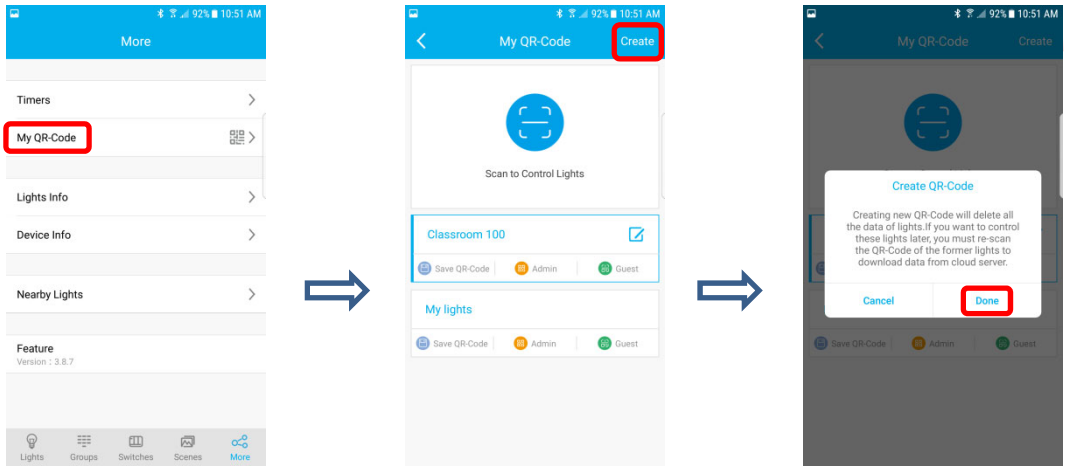
A QR Code is a machine-readable code consisting of an array of black and white squares (see below left), typically used for storing URLs or other information for reading by the camera on a smartphone. Touch the More button on the bottom toolbar (below right) to access the main "More" page.



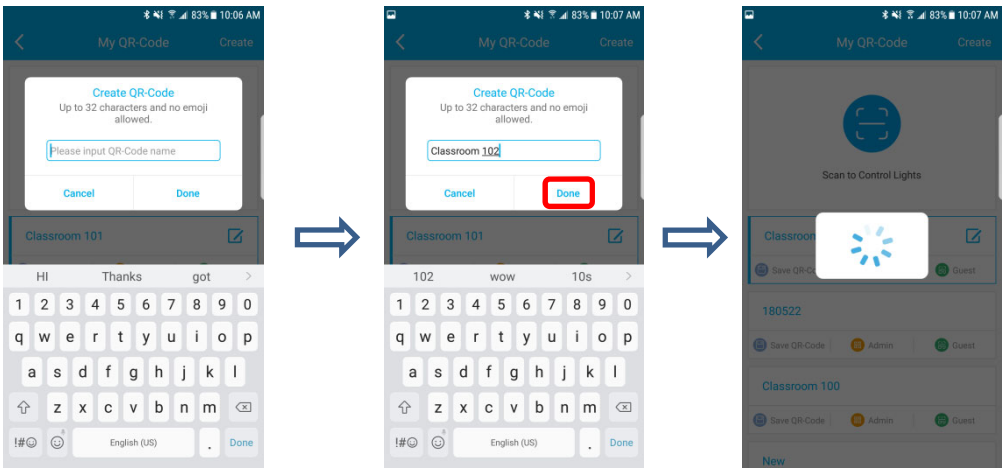


SMART BLU™ uses QR-Codes to save and access Zone programming information. Zones are described on page 11 in detail. In short, a Zone is an area within a building that may have a maximum of 100 (Lights + Switches) or less. A Zone could be as small as an Office or as large as a Warehouse. The first step to programming a Zone is to create a QR-Code. This is done by touching the "My QR-Code" bar in the main "More" page (below left). This takes you to the main "My QR-Code" page (below center). Touch "Create" and you will see a popup warning (below right) that creating a new QR-Code will delete any programming that has been done prior. If you have done programming but have not saved it, touch cancel and you may "Save" the data under the present QR-Code. The process of saving programming data will be discussed further on in this section.

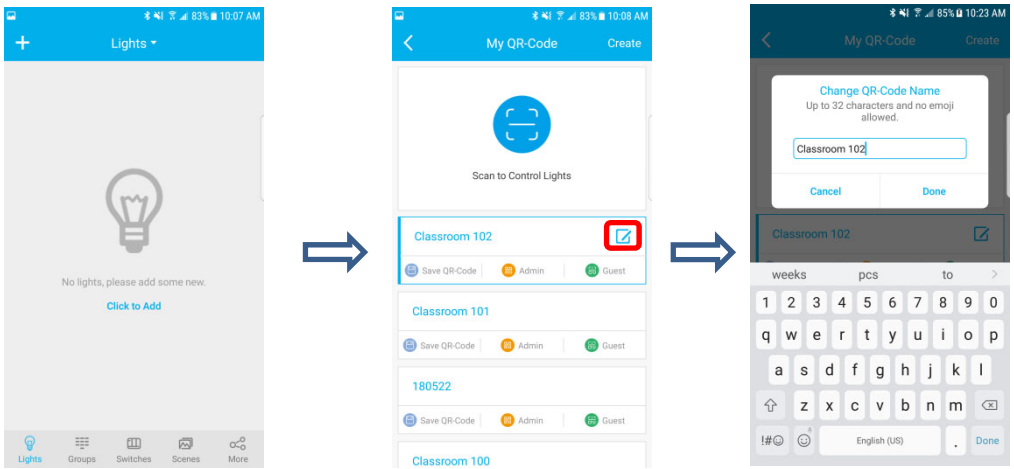
If you have not started programming and are ready to "Create" a new QR-Code for your Zone, touch "Done" (below right).



After touching “Done” on the Create QR popup, you will see another popup that allows you to name your new QR Code Zone (below left). Type in a unique name identifier (below center) for your Zone and touch “Done”. You will then see the processing wheel (below right).

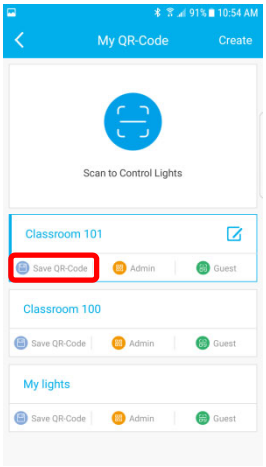


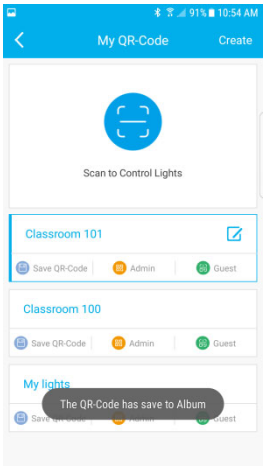
After processing is complete, you will be taken to the “Lights” “Click to Add” page to begin programming your new zone (below left). If you navigate back to the “My QR Code” page, you will see the current Zone listed. If you wish to edit the name of your Zone you may do this by touching the edit button (below center). This will take you to the “Change QR-Code Name” popup (below right) where you may change the name and save by touching “Done”. If programming is complete, you may choose to save. This process is explained on the following pages.



QR-Codes – Saving

After you have completed the programming of your Zone it is important to save the program data to the QR-Code that you created prior to programming. Touch the Save QR-Code button associated with your QR-Code listed in the "My QR-Code" page (below left). You should see a notice that says "The QR-Code has save to Album" indicating success. A copy of the Admin and Guest QR-Codes will be stored in a J2Light subfolder in the "Pictures" folder of your smartphone. These may be scanned at a later time to access the Zone programming you had saved.





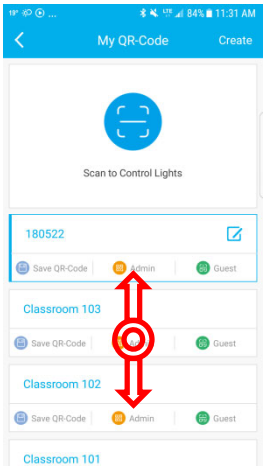
SMART BLU™ will save two different encrypted QR-Codes as follows:

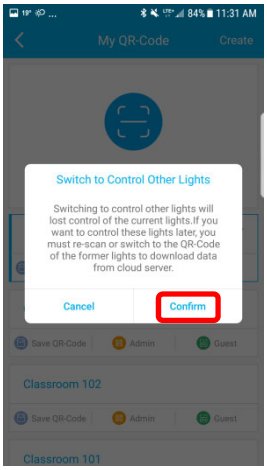
1. Admin > The "Admin" QR-Code allows full access to all programming offered by the APP. This level is generally considered suitable for building owners and managers.

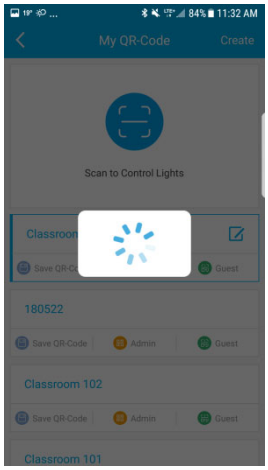
2. Guest > The "Guest" QR-Code allows access to APP Light control functions such as Dim Up, Dim Down, On/Off, Color Tuning, and Scene selection. These functions are available in the Lights, Groups, Switches, and Scenes sections. It does not allow access to programming functions, therefore the user may not "Add", "Delete", "Edit", or "Create".

QR-Codes – Recalling

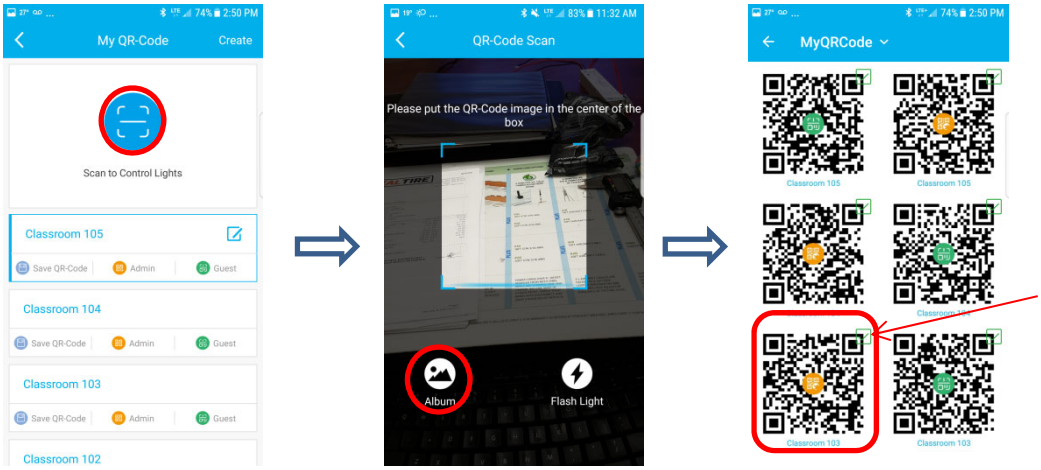
Many QR-Codes may be created and saved through the process of programming multiple Zones in a building. To revisit a Zone for the purpose of re-programming, the building manager will have to enter the “My QR-Code” page (below left) found in the “More” section of the APP. You may scroll through a listing of all the Zones by touching and dragging up and down (arrows below left). When you see the Zone you wish to choose, simply touch the Zone title bar. You will then see a popup asking if you wish to proceed to “Switch to Control Other Lights” (below center). Touch “Confirm” to proceed and you will see the processing wheel appear (below right). After processing is completed you will be taken to the main Lights page to connect to the Lights in the Zone you have chosen.





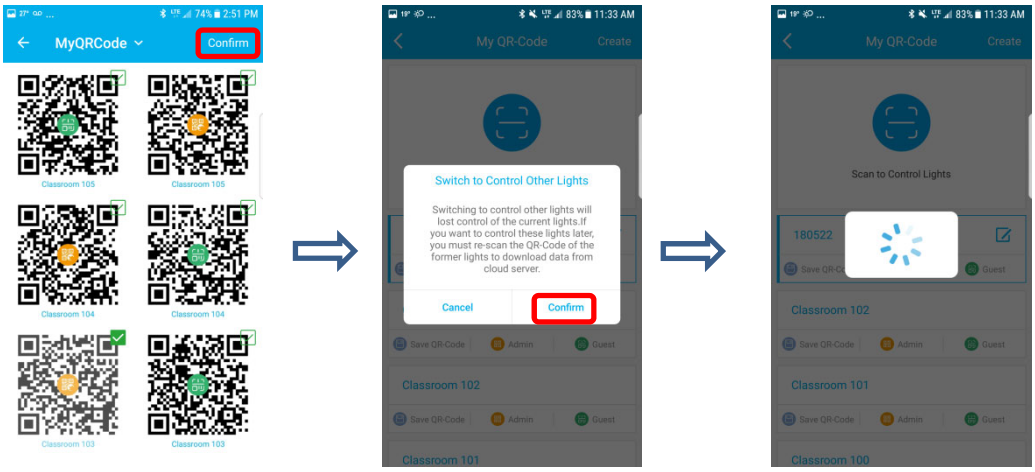


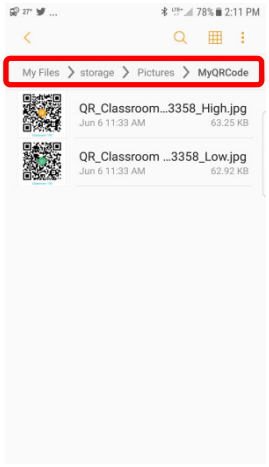
Another way to choose a Zone is to enter the “My QR-Code” page (below left) found in the “More” section of the APP. Touch the “Scan to Control Lights” button. This takes you to the “QR-Code Scan” page (below center). Touch the “Album” button to bring up the QR-Code Library (below right). Here you may choose the Admin version of the Zone you are looking for. The “Admin” versions have orange circles in the center of the QR-Code. Touch the QR-Code with your Zone name. If you notice more than one QR-Code with the same Zone name, choose the latest version (topmost) as you may have saved at multiple points during programming. Touch the Zone of your choice and the top right corner checkbox will turn green (see next page).



QR-Codes – Recalling

When your Zone choice is highlighted by the green checkbox (below left), touch “Confirm”. You will then see a popup asking if you wish to proceed to “Switch to Control Other Lights” (below center). Touch “Confirm” to proceed and you will see the processing wheel appear (below right). After processing is completed you will be taken to the main Lights page to connect to the Lights in the Zone you have chosen.



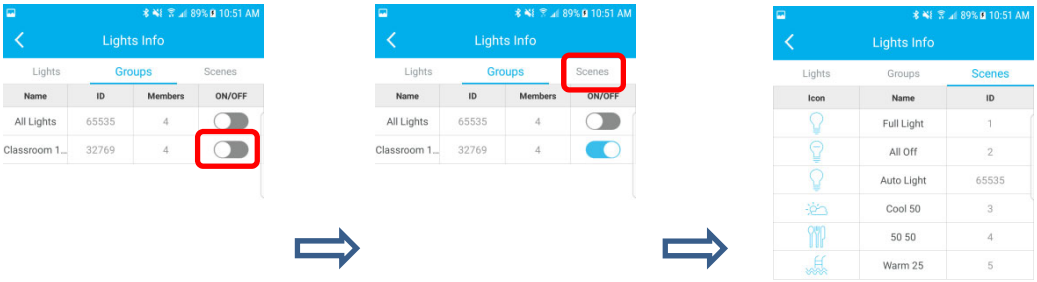


By default SMART BLU™ will store your Zone codes in a file folder called “MyQRCode”. This folder will be a subfolder of “Pictures” in your phones internal memory (left).

Lights Info

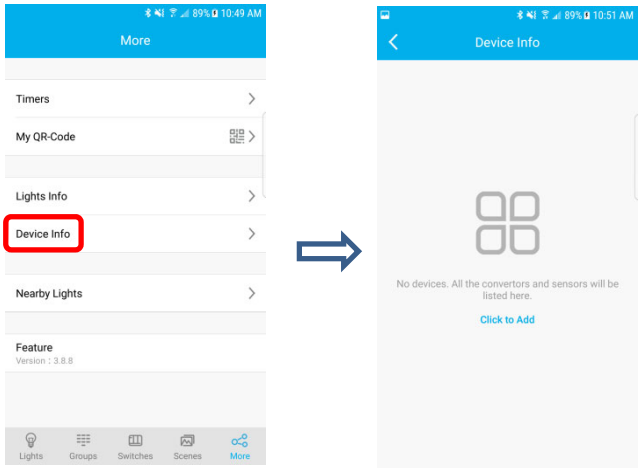
On the main “More” page you can touch “Lights Info” on the menu bar (below left). This will take you to the “Lights Info” page (below center). Here you can choose to view data relative to “Lights”, “Groups”, and “Scenes” as shown on the menu tab. The “Lights” page displays all of the Lights for the Zone listed by “Name”. The “Type” of Light is shown by a graphical icon (below is the icon depicting “color tuning”). The “Version”, “ID”, and “MAC” address are displayed. This type of information may be asked for by technical assistance if you are experiencing a problem. You will also note an “ON/OFF” toggle button indicating the present state of each Light. You may touch the toggle to turn the Light “On” and “Off”. This can be helpful when you are trying to physically locate a specific Light.

Touching “Groups” on the menu tab (above right) takes you to the “Groups” page (below left). A listing of Groups is displayed by “Name”. Group “ID”, number of “Members” (Lights), and “ON/OFF” toggles are shown. Similar to Lights, the Groups information may help during trouble-shooting. Touching the “Scenes” tab (below center) takes you to the Scenes page (below right). Listed are “Icon”, “Name”, and “ID” per Scene.



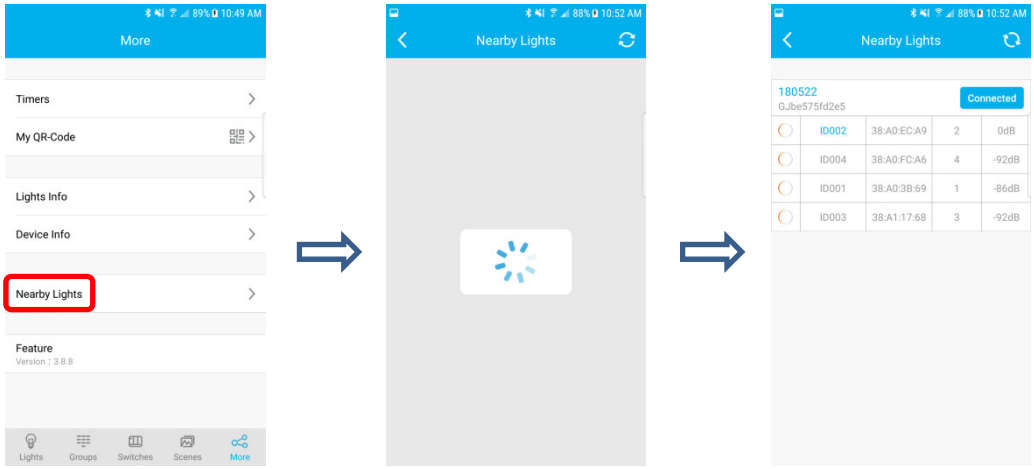
Device Info

On the main “More” page you can touch “Device Info” on the menu bar (below left). This will take you to the “Device Info” page (below right). It is here that you can add SMART BLU™ devices that are not Lights or Switches. This would be a future device that is not currently available. As devices are developed, so too will the instructions be added here.



Nearby Lights

On the main “More” page you can touch “Nearby Lights” on the menu bar (below left). This will start the processing wheel (below center) as SMART BLU™ searches for Nearby Lights. After processing is complete you will arrive at the “Nearby Lights” page (below right). This page will show the Zone QR-Code Name (ie. 180522) and whether or not the Lights are “Connected”. The Light “Type”, “Name”, “MAC Address”, “ID”, and “Communication Description” are displayed. This information may prove useful in troubleshooting situations.



Frequently Asked Questions

Adding Lights:

Q1. I'm having trouble adding Lights to the APP. What can I do ?
A1. Make certain there is power to your Lights and that your Lights are embedded with SMART BLU™ technology. Completely exit the APP and restart. If the Lights fail to Add, exit the APP and restart your phone and try again. If the Lights fail to Add, then try to perform a **hard reset** of the Lights to erase any program memory by doing the following:

1. Turn power Off for 10 seconds.
2. Turn power On for 1 full second.
3. Turn power Off for 5 seconds.
4. Turn power On for 1 full second.
5. Turn power Off for 5 seconds.
6. Turn power On for 1 full second.
7. Turn power Off for 5 seconds.
8. Turn power On for 3 seconds.
9. Turn power Off for 5 seconds.
10. Turn power On for 3 full second.
11. Turn power Off for 5 seconds.
12. Turn power On… Lights should blink Off and On 3 times.

If Lights do not blink to indicate success, repeat. Contact tech support if unsuccessful. If successful, try to Add Lights to the APP. If you still cannot add Lights contact tech support.

Q2. I can Add some Lights but not all ?
A2. First try to Add the Lights that failed to Add the first time. If this does not work, exit the APP and restart. Try to Add the remaining Lights again. Make sure that you are within range of the Lights you wish to Add. If this continues to fail, exit the APP and restart your smartphone.

Q3. After Adding Lights, some fail to be controllable ?
A3. Go back to the Add Lights page and see if the APP loads the Lights that are uncontrollable. If they show up, repeat the Add process. If they do not show up, try to delete them and retry adding.

start swiping not from the icons if you want to pull the lists. Start pull from the empty area.

6 Appendix 1: System parameters

Lights	Up to 100 Lights in one Zone (QR Code). It is suggested to manage Lights in different Zones (QR codes) if there are more than 100 Lights.
Groups	One Light can be added to maximum 32 Groups. If you add it to the 33rd Group then it will automatically exit the first Group. Each Zone can hold up to 30,000 groups.
Scenes	One Light can store up to 32 Scenes. If you store the 33rd scene to it then the first Scene will be lost. Each Zone can hold up to 127 Scenes.
Timers	Each Zone can hold up to 32 timers.
Switches	Each Zone can hold up to 10 Switches.
Connection Distances	Smartphone to first Node < 50 feet or 15 meters Light to Light with Internal Antenna in an open space < 150 feet or 45 meters Light to Light with Internal Antenna through 1 typical stud wall < 65 feet or 20 meters Light to Light with External Antenna in an open space < 600 feet or 180 meters
Motion Detector Coverage	PIR for office/classroom ceilings (<10ft) = PIR for warehouse ceilings (<45ft) =