

## General information:

To provide a robust and secure communication network, SANlight Bluetooth dimmer use Bluetooth mesh technology. One dimmer of this mesh must be selected to be the gateway (the proxy-node) to other Bluetooth devices, for example your smartphone. At the very first start of the app, you need to add all dimmers (devices) to your mesh network. After setting up your mesh network you need to connect to one dimmer only. Depending on your app settings this will be done automatically. The Bluetooth mesh standard needs to get your location data. Therefore, you must enable location data access. This is specified by Android or iOS.

**Note:** GPS data are not used for getting your location. Your rough location is identified by checking connection to near transmitter stations only. Your data will not be provided to third parties.

**Note:** The SANlight Mesh app is working on Android and iOS operating systems.

## Introduction:

The SANlight Bluetooth dimmer is used to set the brightness of a SANlight luminaire. It is available for Q-Series Gen2 and EVO-Series. The different dimmers can be identified by their plugs. Bluetooth dimmers for Q-Series Gen2 have a black plug, while for EVO-Series the plug is blue.

Be aware, that dimming to 0% (off) is only possible with the EVO-Series, whereas with Q-Series dimming is possible down to 20%.



Please note, that the dimmer for the Q-Series Gen2 can only be used with Q-Series Gen2 luminaires and EVO-Series dimmers can only be used with EVO-Series luminaires!

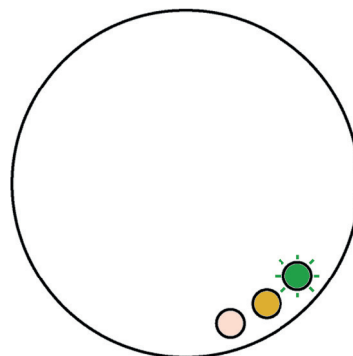


Compatibility warning: SANlight dimmers are compatible with SANlight luminaires only! Third party lights are not supported.

## Installation instructions:

To install the Bluetooth dimmer:

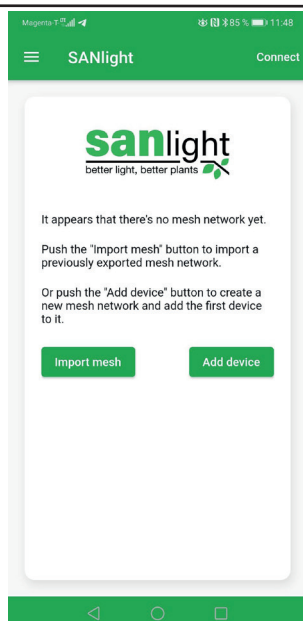
1. Download the SANlight Mesh App from Google Play or iOS App Store.
2. Connect your SANlight luminaire to a functioning power outlet. The light will now shine at 100% brightness.
3. Plug your Bluetooth dimmer into your SANlight luminaire. Once plugged in, your light will shine at 50% brightness.
4. The green flashing LED signalizes, that the dimmer is ready to connect. The constant shining orange LED shows, that the dimmer is visible for other Bluetooth devices.
5. Please follow the pairing instructions down below.



## Pairing instructions:

Before you can use your Bluetooth dimmer, you have to pair every dimmer with your SANlight Mesh app. If you have not installed the SANlight Mesh app yet, please do so. You can download the app from the Google Play or iOS App Store. After successful installation, follow the steps below.

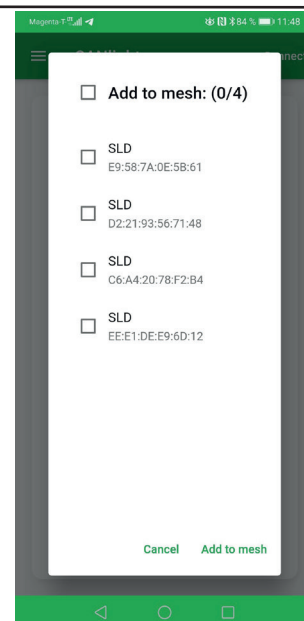
When you initially start the SANlight Mesh app you will see the following screen.



## Pairing instructions:

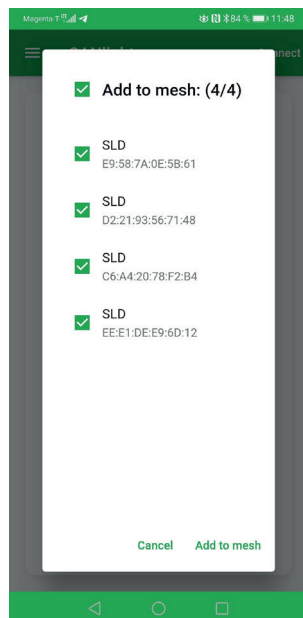
After tapping "Add device" you will see the following screen, where all available Bluetooth dimmers are listed. The dimmers are named SLD.

**Note:** It can take a few seconds until a dimmer gets visible.



## Pairing instructions:

Select all SANlight dimmers, which you want to have in your mesh network and tap “Add to mesh”.



## Pairing instructions:

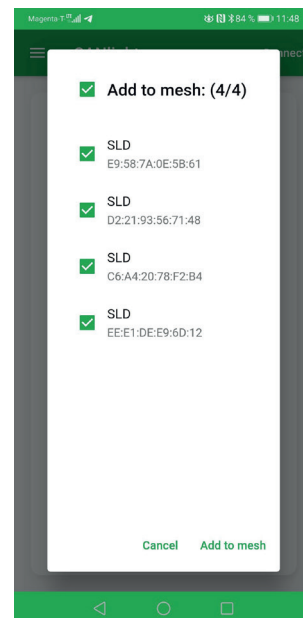
Now the pairing process begins.

**Note:** A dimmer can be paired only once! After a Bluetooth dimmer is connected, it will no longer be shown at the “Add to mesh” window.

**Note:** Pairing process will need up to one minute per dimmer.

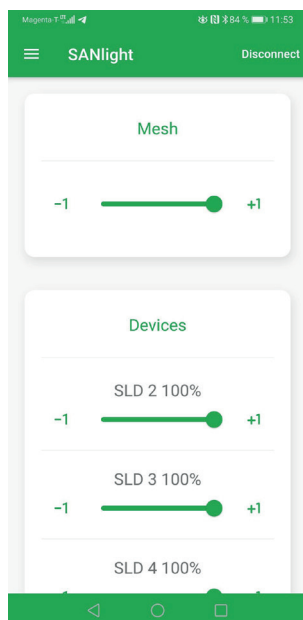
**Note:** Do not switch off your smartphone while pairing! If the phone is switched off during pairing, the dimmer will not properly work, which requires a reset to fix.

**Note:** If not all your dimmers are shown, please use the troubleshooting guide.



## Pairing instructions:

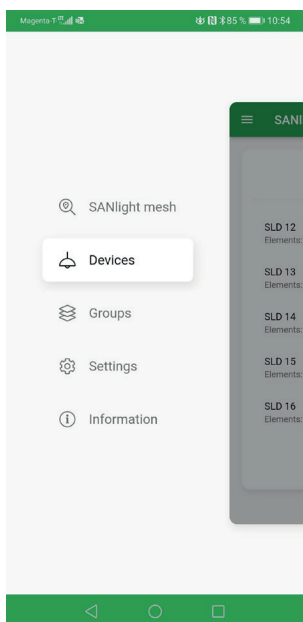
Once pairing is done, the app will automatically connect to one of your dimmers and you're ready to operate your lights via the “SANlight mesh” screen. All paired dimmers are now closed and cannot be connected to other devices, except the already paired one(s).



## Using the App:

The SANlight app is split into five sections. To switch between sections, open the menu by tapping on the menu button (☰) at the top left corner. You will see the following screen.

**Note:** Future expansions through updates are not yet taken into account.



## Using the App:

- **SANlight mesh screen**
  - Setting light levels to individual dimmers or a group of dimmers.
- **Device screen**
  - Add/pair new dimmers.
  - Remove already paired dimmers by resetting them.
  - Rename already paired dimmers.
  - Add already paired dimmers to groups.
  - Hide dimmers for other Bluetooth devices.
- **Group screen**
  - Create groups.
  - Edit groups.
  - Delete groups.
- **Settings screen**
  - Enables you to adjust the app individually.
- **Information**
  - Contact information.
  - Terms of service.
  - Version & Build information.

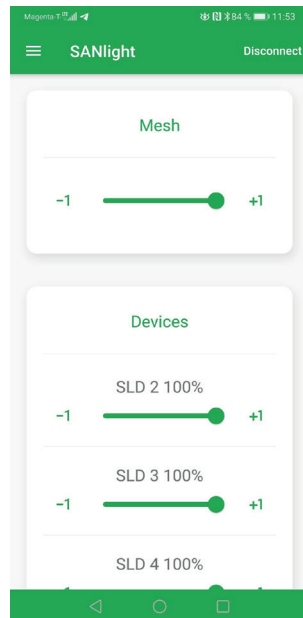
## SANlight Mesh screen:

On „SANlight Mesh“ screen you set the brightness of your lights or of your groups of lights.

The “Mesh” card at the top of the screen is used to set the brightness of all lights in your network globally.

„Mesh” card can be removed in section „Settings”

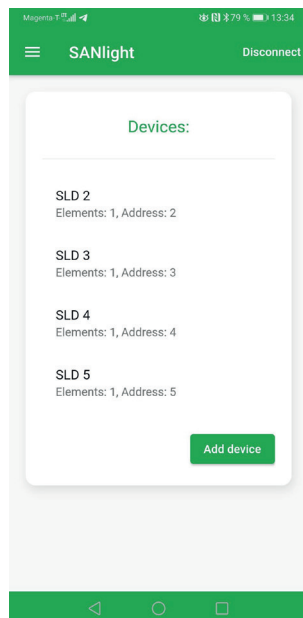
Any dimmer/lights that are not assigned to a group will be shown on the card labeled „Devices”.



## Devices screen:

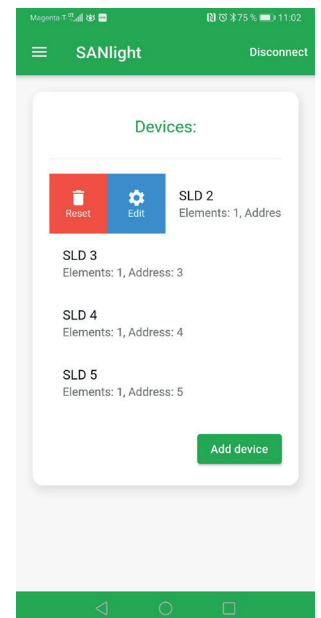
On your “Devices” screen you manage all SANlight Bluetooth dimmers.

- Push the “Add device” button to add/pair a new dimmer.



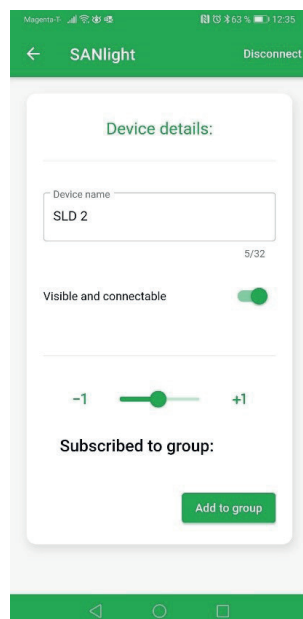
## Devices screen:

- Swipe over a dimmer from left to right to show the options menu.
- Red “Reset” button is used to remove a dimmer from your SANlight mesh. **Note:** Once reset, a dimmer must be paired, before it can be used again. **Note:** To reset a dimmer, it must be connected to your mesh network. **Note:** Dimmer can be reset manually by using the red side of the magnetic key (5 sec).
- Tap blue “Edit” button to change each device details screen



## Device details screen:

The „Device details“ screen is used to edit settings of each individual Bluetooth dimmer.

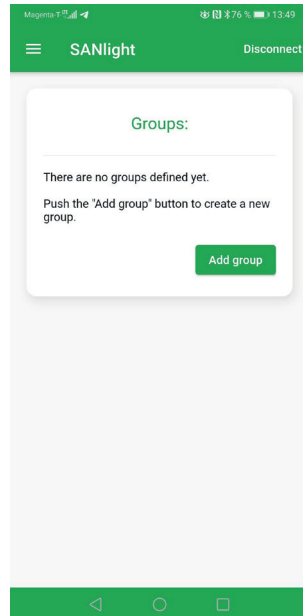


## Device details screen:

- **Device name** -Is used to change the name of a Bluetooth dimmer
- **Visible and connectable** -Enables or disables stealth mode. Disable the switch to set a Bluetooth dimmer to stealth mode. (Devices with specialised software, like Bluetooth Scanners, may still detect the dimmer). **Note:** At least one dimmer must be visible to have access to your network. To control your SANlight mesh network with a certain number of smartphones/tablets at the same time, at least the same number of dimmers must be set to „Visible and connectable“.
- **Slider control** -Used to set the dimmers value. Usefull to identify a dimmer, while setting.
- **Subscribed to group** -List of groups to which the dimmer belongs.
- **„Add to group“ button** -Used to add a dimmer to a group.

## Groups screen:

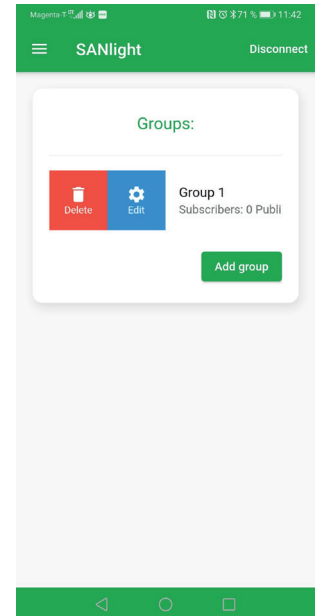
On the „Groups“ screen you can organize your Bluetooth dimmers into certain individual groups. Tap the „Add group“ button to add a new group.



## Groups screen:

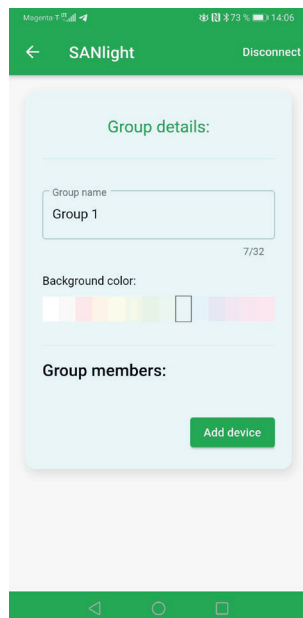
Swipe from the left to right over an existing group to show the „Group details“ menu.

- Red „delete“ button is used to delete a group.
- Tap blue „Edit“ button to enter „group details“ screen.



## Group details screen:

„Group details“ screen is used to edit group settings. Following options are available.

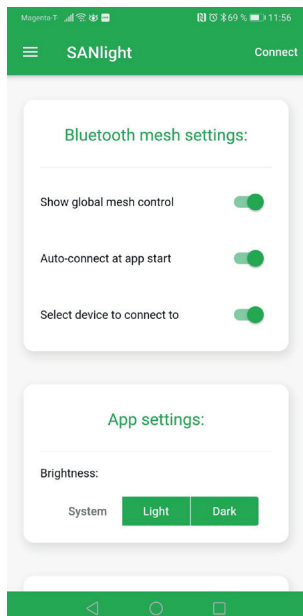


## Group details screen:

- **Group name**  
-Is used to change the name of the individual group.
- **Background color**  
-Sets groups background color, which is useful to distinguish between different groups.
- **Group members**  
-A list of all Bluetooth devices, which belong to the group.  
-Swipe over a dimmer from left to right and tap delete to release the certain dimmer from the group.
- **„Add device“ button**  
-Tap it to add a Bluetooth dimmer to a group.

## Settings screen:

At this screen you can change global settings for your mesh network.



## Bluetooth mesh settings:

- **Show global mesh control**  
-If enabled, „SANlight mesh“ screen will show a card labeled „Mesh“. This slider is used to set dimming levels globally.
- **Auto-connect at app start**  
-If enabled, the app will automatically connect to your SANlight mesh during app start.
- **Select device to connect to**  
-If enabled, you will be prompted to select a Bluetooth dimmer to connect to. **Note:** Only appears when reconnecting.

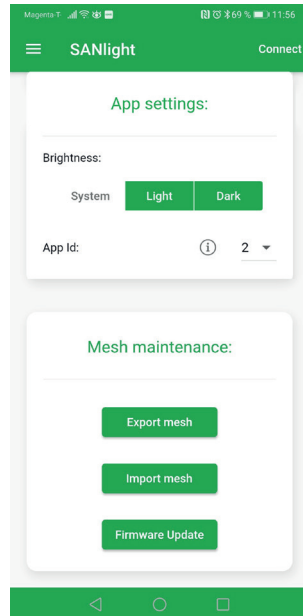
## App settings:

- **Brightness**  
-The app uses the system's brightness setting by default, but you can force light or dark mode if you desire.



## Mesh Maintenance:

At this screen you can export and import your Mesh networks and update the SANlight Mesh App.



## Mesh Maintenance:

- **Export Mesh**
  - Exports the mesh configuration. Used to transfer mesh configuration to other devices.
  - Note:** Export mesh generates a „SANlightMesh.json“ file, which must be stored locally.
- **Import Mesh**
  - Imports a previously exported „SANlightMesh.json“ file. Just follow the displayed instructions on screen.
- **Firmware Update**
  - Used to perform a firmware update of your Bluetooth dimmers.

## Information screen:

Have a look at the Informations screen, if you want to get in touch with SANlight or if you're interested in the App's terms of use and privacy policy.



## About the privacy policy:

Please note that the SANlight mesh app does not collect any personal data. There is no social media integration and there is no analytics service collecting and data. **You are using this app anonymously.**

## Meaning of the status LED:

During initialization, the dimmer shortly sets each LED in the following order: Red, Orange and Green. After the initialization sequence is done, the LED have the following meaning:

- **Green LED blinking:** Dimmer is waiting to be paired. Please follow pairing instructions above. The lights brightness is at 50%.
- **Green LED on:** The dimmer is paired and ready to use. The lights brightness can be adjusted by using the SANlight app.
- **Orange LED off:** The dimmer is in stealth mode, hence it will not be visible for any other Bluetooth devices, except with specialized software like some Bluetooth scanners.
  - Note:** Enabling/disabling stealth mode is possible with the white side of the magnetic key, or with your SANlight mesh app.
  - Note:** Smart devices with specialized software (Bluetooth Scanners) can still detect dimmers.

**Note:** At least one dimmer of your mesh network needs to stay visible. Otherwise you can not connect to your mesh.

**Note:** As the dimmers are sharing data between each other, you only need one dimmer visible to connect with the mesh network.

- **Orange LED on:** The dimmer is visible and the SANlight app can connect to it. However, standard Bluetooth devices can see your dimmer too.
- **Red LED on:** Red side of the magnetic key is touching the dimmer. The dimmer will reset itself, if the magnetic key stays for 5 seconds.
- **All LED are off:** Dimmer is off due to missing power or defect. Please check out our troubleshooting guide.

**Magnetic key:**

The magnetic key is used to enable/disable stealth mode or to reset the dimmer to factory settings.

**Setting stealth mode with magnetic key:**

Stealth mode is used to make your Bluetooth dimmer invisible for other standard Bluetooth devices. While stealth mode is enabled, the dimmer cannot be seen by Bluetooth devices, except specialized Bluetooth scanners, or with scanner apps equipped devices. It is not possible to connect to a dimmer in stealth mode directly.

Once the dimmer is paired to your mesh network, the dimmers are sharing data between each other. Following, you need only one dimmer visible to connect with your whole mesh network.

To enable or disable stealth mode, touch the dimmers flat surface with the white side of the magnetic key.

The orange LED will change it's state to signalize stealth mode: If the orange LED is on, the dimmer is visible, if it is off, the dimmer is in stealth mode.

To give you some visual feedback, the light will shine at 100% while the white side of the magnetic dip touches the dimmer.

**Reset dimmer with the magnetic key:**

Resetting your dimmer becomes necessary, if you lose your smartphone and don't have a backup of your mesh configuration.

**Note:** How to create a backup is described in the section „Settings“ screen.

To reset your Bluetooth dimmer, touch the dimmers flat surface with the red side of the magnetic key for 5 seconds.

**Note:** Resetting a dimmer removes the dimmer from the SANlight mesh. After the reset, the dimmer will:

- be visible as a Bluetooth device.
- no longer be able to dim the light until it is paired again.

To give you some visual feedback, the light will shine at minimum brightness, and the red LED will glow, while the red side of the magnetic key touches the dimmer.

Once the reset is done, the light will shine at 50% brightness, green LED will flash and orange LED shines constantly.

As an alternative, you can perform a reset in the app, under the „Devices“ screen.

It's important, that during this procedure the dimmer is connected to your mesh network.

**Maximum transmitting power**

	Service frequency bands	Parameter	min	Typ	max	Unit
Transmit	2 400 MHz to 2 483,5 MHz	Output Power (Channels 0-39)	-20		+4	dBm
Receive	2 400 MHz to 2483,5 MHz					
		EIRP	-19,4		4,6	dBm