

Installation and Operation Guide – myPI-LED mobile & NeoLink Box

1 OVERVIEW

About the myPI-LED App



- Builds up a control system for NeoLink and ZigBee 3.0 luminaires together with the NeoLink Box*
- NeoLink Box: Interface between NeoLink or ZigBee luminaires and myPI-LED App
- myPI-LED App for Android and iOS

**The NeoLink Box can only be used in combination with NeoLink or ZigBee luminaires by KITEO or in combination with NeoLink or ZigBee PI-LED systems by Lumitech.*

At the installation location:



- 110V-230V AC supply line (electrical supply of the NeoLink Box)
- WLAN Router (DHCP capable) including RJ45 cable (accessories for the NeoLink Box)

The complete system: everything at a glance

<p>STEP 1: Installation/Preparation Prepare the NeoLink Box/myPI-LED App</p> <p>STEP 2: Creating the network Register luminaires (and optionally K-ZWALLYs) in the Box/App</p> <p>STEP 3: Operation Configure luminaires (and optionally K-ZWALLYs) and control luminaires</p>	<p>VARIANT 1: No electrical connection between luminaires and Box</p> <p>RECOMMENDED: Permanent power supply for NeoLink Box.</p>
<p>Network ranges:</p> <ul style="list-style-type: none"> - max. 7m (clear view) between NeoLink Box and first luminaire - max. 10m between luminaires <p>INFORMATION: <i>The ranges stated are approximate values. The actual ranges may vary depending on specific structural conditions.</i></p>	<p>VARIANT 2: Electrical connection between luminaires and Box</p> <p>RECOMMENDED: Permanent power supply for NeoLink Box.</p>

Note on installation variant 1 – no electrical connection between luminaires and Box:

Up to **200 luminaires** and **30 K-ZWALLYs** can be integrated into the network.

Note on installation variant 2 – electrical connection between luminaires and Box:

All luminaires that are connected to the Box can be switched off current-free over the myPI-LED App (see chapter 5, ON/OFF). Luminaires with a **maximum connection load of 1000W@230V AC** can be connected. Up to **30 K-ZWALLYs** can be integrated into the network.

2 PREPARING the NeoLink Box and the myPI-LED App

Danger due to electrical voltage!



Before performing installation work on the NeoLink Box, switch off the voltage to all components and the relevant circuit and check that they are voltage free. The power supply unit must not be removed or disassembled from the NeoLink Box!

<p>STEP 1: Connection to 110-230V AC</p>	<p>Connect the NeoLink Box to the 230V AC connection lines (L-N). To do this, connect the phase and the neutral wire to the corresponding terminals (L/N IN) of the mating plug. Ensure that the connection lines are securely anchored to the terminals!</p>
<p>STEP 2 (optional): Connecting the luminaires to the NeoLink Box</p>	<p>Connect the 230V AC voltage supply of the luminaires to the corresponding terminals (L/N OUT) of the mating plug.</p> <p>Luminaires with a maximum connection load of 1000W @230V AC can be connected.</p>
<p>STEP 3: Connecting the NeoLink Box with the WLAN Router and download the myPI-LED App</p>	<p>Connect NeoLink Box and WLAN Router by an Ethernet cable (RJ45), then activate/switch on NeoLink Box, WLAN Router and luminaires. Download the myPI-LED App over the Lumitech-Website or over the Playstore/Appstore and install the App on the mobile device. Activate „WLAN“ on the mobile device and select the WLAN network of the WLAN router to which the NeoLink Box is connected (no internet connection necessary).</p>

Note on the myPI-LED App: The App contains a help menu. For all the following points, you find a description directly inside the App.

3 NETWORK SETUP and NETWORK TEST



Creating the network is the starting point for all further actions and is mandatory to perform. **Up to 200 luminaires** can be logged in to the network.

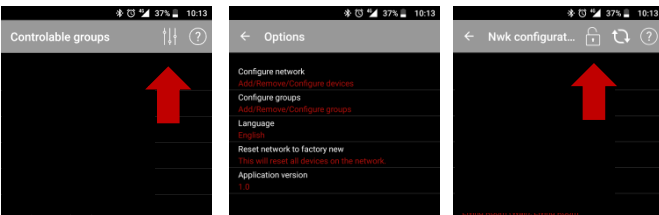
Requirements:

- All NeoLink or ZigBee luminaires are completely cabled
- All NeoLink or ZigBee luminaires are switched on and are lighting (white light)
- NeoLink Box is active
- Mobile device with myPI-LED App is ready for use (see section 2)

Register luminaires to the network of the NeoLink Box

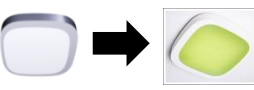
Switch off all luminaires that should not be logged in to the network!

State: INITIAL CONDITIONS



- Start the App & click on the symbol „Options“ in the start screen
- Click on “Configure network“ in screen “Options”
- Click on „Open network“ in screen “Nwk configuration”


State: NETWORK OPEN



Luminaires automatically log in to the network and change their colour from neutral white to green. Registered luminaires are displayed in the App.

After 3 minutes, the network closes automatically. If all luminaires are in the network before the 3 minutes have expired, the process can be stopped manually by clicking on „Close network“ in the App.

Note: Repeat this process as long as all luminaires have logged in to the network. Keep registered luminaires switched on!
The Box and the active luminaires must not be switched off (current-free) as long as the network is open!



State: CLOSED NETWORK AFTER CONNECTION OF THE LUMINAIRES

Testing and renaming a luminaire:

- Android: long tap on „Light x“ / iOS: swipe left „Light x“
- select „Identify“ (luminaire blinks) or „Rename“ in the context menu
- **NOTE: Luminaire names are stored only inside the App!**
Therefore, luminaires names are not available on any other mobile device but have to be stored on each mobile device in use.

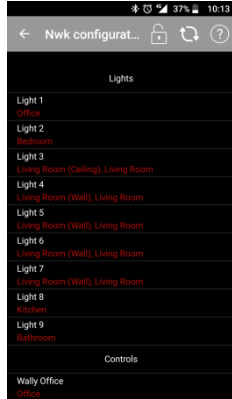
Rename
Identify
Remove

OPTIONAL: Integration of K-ZWALLY(s) into the network

Up to 30 K-ZWALLYs can be logged in to the network of the NeoLink Box.

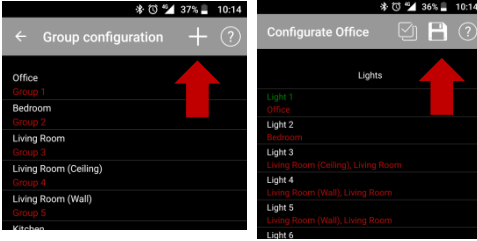
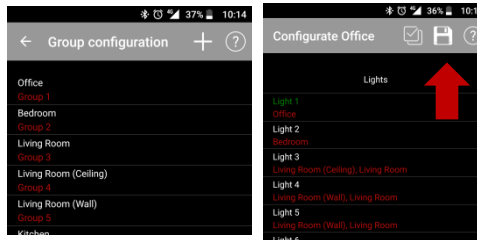
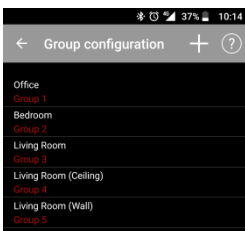
Requirements:

- The K-ZWALLY to be registered to the network is active (Status LED shines)
- The K-ZWALLY to be registered to the network is in factory state (is **not member** of any network and **does not own** a network)
- All other K-ZWALLYs are not active (if this is enabled by the installation)
- NeoLink Box is active
- Mobile device with myPI-LED App is ready for use (see section 2.2), App is open

Register the K-ZWALLY(s) to the network of the NeoLink Box	
State: INITIAL CONDITIONS	
Open the network of the NeoLink Box with the myPI-LED App (as described at the beginning of section 3)	
State: NETWORK OPEN	
<ul style="list-style-type: none"> - Press K-ZWALLY for ≥ 15 seconds & release \rightarrow Status LED of the K-ZWALLY switches off and then on again - The K-ZWALLY logs in to the network automatically - The registered K-ZWALLY is displayed in the myPI-LED App. <p>Note: <i>The Box and the active luminaires must not be switched off (current-free) as long as the network is open!</i></p>	
State: NETWORK CLOSED AFTER REGISTRATION OF THE K-ZWALLY	
<ul style="list-style-type: none"> - Testing by operation of the K-ZWALLY: all luminaires react - Renaming the K-ZWALLY: for Android, long tap on the WALLY for iOS, swipe left the WALLY - select „Rename“ in the context menu - NOTE: K-ZWALLY names are stored inside the NeoLink Box! <i>Therefore, is the myPI-LED App is opened on any other mobile device, the K-ZWALLY names are available there.</i> 	<div style="display: flex; justify-content: space-around; border: 1px solid black; padding: 5px;"> Rename Identify Remove </div>

4 GROUP CONFIGURATION


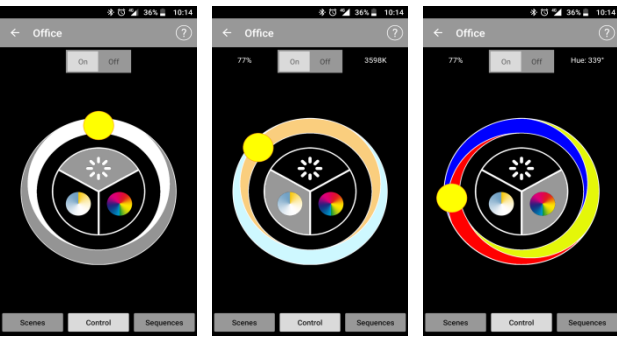
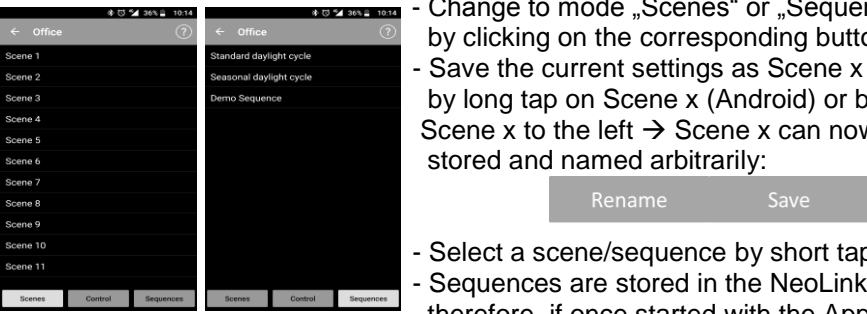
Requirement: The NeoLink network is built up and active (luminaires, NeoLink Box and optional K-ZWALLY(s) are switched on/active).

Action	Realisation with the myPI-LED App	
<p>Each action starts with a click on “Group configuration” in the screen “Options” All luminaires automatically go to 5% brightness and warm white</p>		
<p>Creating a new group</p>		<ul style="list-style-type: none"> - Click on „+“ → enter name for group (e.g. “Office”) - Select Lights/K-ZWALLYs for group „Office“. Selected luminaires automatically go to 100% brightness and cold white. - Click on the „Save“ symbol <p>NOTES:</p> <ul style="list-style-type: none"> - If a group is built up of luminaires together with a K-ZWALLY, this K-ZWALLY only controls the luminaires of this group. A K-ZWALLY can not be member of more than one group. - A luminaire can be assigned to more than one group.
<p>Adapt an existing group</p>		<ul style="list-style-type: none"> - Select existing group from group list (e.g. „Office“) <ul style="list-style-type: none"> - Members of the selected group (Lights/K-ZWALLYs) are shown in green inside the App → Remove from group by clicking on the member (luminaire goes to 5% brightness and warm white) - Non-members of the selected group (Lights/K-ZWALLYs) are shown in white inside the App → Add to group by clicking on the member (luminaires goes to 100% brightness and cold white) - By clicking on the „Save“ symbol, all changes are updated <p>NOTE: Below each network member (Light or K-ZWALLY) it is shown in red to which groups the network member currently belongs.</p>
<p>Rename or delete a group</p>		<ul style="list-style-type: none"> - Long tap (Android) on group/swipe left (iOS) the group to be deleted/to be renamed - Select „Delete“ or “Rename” in the context menu <div style="display: flex; justify-content: center; gap: 20px;"> <div style="border: 1px solid gray; padding: 5px 15px; background-color: #ccc;">Rename</div> <div style="border: 1px solid gray; padding: 5px 15px; background-color: #f00; color: white;">Delete</div> </div>

5 OPERATING the network









Operation of the luminaires in the network of the NeoLink Box with the myPI-LED App is done either in Broadcast mode (all luminaires react) or in groups (if there have already been groups built up, see chapter 4).

With the myPI-LED App, brightness levels, colour temperatures and RGB colours can be set manually¹. In addition, up to 16 light scenes (brightness and colour) can be stored and recalled for each group. In the automatic mode, the myPI-LED App offers a selection of 3 daylight curves/sequences.

Feature	Action in the myPI-LED App and reaction of the luminaires
<p>Selection of the luminaires to be controlled</p>	 <ul style="list-style-type: none"> - Start screen: „All lights in network“ and all already existing group are displayed - Select „All lights in network“: Broadcast mode (all present luminaires react to all following actions) - Select a luminaire group: all luminaires that are member of the group react to all following actions - The selection automatically leads to the control screen (see below)
<p>All following actions refer to the example group „Office“</p>	
<p>Manual control (brightness, CCT or colour)</p>	 <ul style="list-style-type: none"> - Change between the modes „brightness“, „CCT“ and „colour“ by clicking on the symbol inside the control wheel - Set brightness, CCT or colour by moving the slider on the control wheel (values are shown top left/right) - Change from the modes „Scenes“ or „Sequences“ back to manual control by clicking on the button „Control“
<p>Scenes and Sequences</p>	 <ul style="list-style-type: none"> - Change to mode „Scenes“ or „Sequences“ by clicking on the corresponding button - Save the current settings as Scene x by long tap on Scene x (Android) or by wiping Scene x to the left → Scene x can now be stored and named arbitrarily: - Select a scene/sequence by short tap - Sequences are stored in the NeoLink Box and therefore, if once started with the App, keep running even without the App
<p>ON/OFF</p>	<ul style="list-style-type: none"> - Click on „On“ or „Off“ in the control screen - ON/OFF is performed also in automatic mode (sequence is running)

¹Inside of the settings menu of the myPI-LED App, among other things, CCT range (max. 1,800 K-16,000K) and type of colour setting (RGB or CIE-xy) can be chosen.

6 SPECIAL APPLICATIONS & TROUBLESHOOTING

Situation	Description / context	Solution / approach						
Issues for network build up	Luminaire/K-ZWALLY does not register to the network of the NeoLink Box	<ol style="list-style-type: none"> 1. Disassemble the NeoLink Box and connect the Europlug cable to the Box, ensuring that the cable length is sufficient 2. Now place the NeoLink Box near to the non-registered luminaire/K-ZWALLY (< 7m from the luminaire/K-ZWALLY!) 3. Build up the network, following the instructions in section 3 						
Network Reset	<p>The network needs to be reset e.g. if there must be a replacement of the luminaires in the installation or if there are general massive changes for the light installation which require a new setup of the installation.</p> <p>During the network reset, all NeoLink and ZigBee devices are set back to their factory state and are logged out from the network of the NeoLink Box.</p>	<ol style="list-style-type: none"> 1. Switch on ALL network members (NeoLink Box, K-ZWALLY(s), luminaires) 2. Recommended: Set all luminaires to a bold colour (e.g. red). This will help you to see whether the reset has been successful. 3. Choose „Reset network to factory new“ in the „Options“ screen of the myPI-LED App (see chapter 3) and then click on “Reset”. 						
		<table border="1"> <thead> <tr> <th>Before Reset</th> <th>During Reset</th> <th>After Reset</th> </tr> </thead> <tbody> <tr> <td> <p>The luminaire is still in the network</p>  </td> <td> <p>The luminaires switch off</p> </td> <td> <p>The luminaire has been removed from the network → 4000K@100%</p>  </td> </tr> </tbody> </table>	Before Reset	During Reset	After Reset	<p>The luminaire is still in the network</p> 	<p>The luminaires switch off</p>	<p>The luminaire has been removed from the network → 4000K@100%</p> 
		Before Reset	During Reset	After Reset				
<p>The luminaire is still in the network</p> 	<p>The luminaires switch off</p>	<p>The luminaire has been removed from the network → 4000K@100%</p> 						
K-ZWALLY(s) does/do not show any function after the Reset.								
New NeoLink Box	The NeoLink Box which owns the current network is defective and replaced by a new NeoLink Box.	<p>Requirement: Before building up a network with the new NeoLink Box, all network members must be in Reset state (manual network reset).</p> <p>Please contact a KITEO service technician!</p> <p>After the Reset of all luminaires and K-ZWALLY(s), a new network can be build up with the new NeoLink Box.</p>						
Removing single network members	Single luminaires and/or K-ZWALLY(s) are not needed in this network any more (and, for example, should be relocated to another network)	<p>Requirement: Before a luminaire/K-ZWALLY can be assigned to another network, it must be removed from its current network.</p> <ol style="list-style-type: none"> 1. The network member to be removed must be switched on! 2. Recommended in the case of a luminaire: Select a bold colour (e.g. red). This will help you to see whether the luminaire has been successfully removed from the network. 3. Open the screen „Network configuration“ in the myPI-LED App (see chapter 3); find the member to be removed; long tap (Android)/swipe left(iOS). 4. Click on „Remove“ in the context menu. 5. If the member to be removed is a luminaire, a successful process can be recognized as described in „Network Reset“. 6. If a K-ZWALLY has been removed from the network, no luminaires in the network react to this K-ZWALLY any more. 						
New or additional luminaire(s)	Replacing or adding luminaires	Register the new luminaires to the NeoLink network by following the instructions in section 3 (note the range recommendations on page 2!).						