



## **About the K-ZWALLY**





- Control unit for NeoLink and ZigBee 3.0 luminaires\*
- Rotary control for wall installation

## At the installation location:



NOTF:

Wally

The "night lowering" is only active if:

- the luminaires are

Wally are set to

OFF/ON by a switch

(in the second case,

seconds until the

night lowering gets atcive when

switching Wally and luminaires ON

switched by the

- luminaires AND

it takes several

Flush-mounted connector socket:

Minimum depth: 61mm

230V AC cable (supply voltage for the K-ZWALLY)

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



#### ATTENTION:

The K-ZWALLY is solely intended for use in dry, indoor spaces.

## The complete system: everything at a glance

#### STEP 1: Assembly

Install the K-ZWALLY

#### STEP 2: Creating the network

Register luminaires at the K-ZWALLY

#### **STEP 3: Operation**

Control luminaires with the K-ZWALLY

#### **Network ranges:**

max. 7m (clear view)2



max. 10m

# INFORMATION:

The ranges stated are approximate values.

The actual ranges may vary depending on specific structural conditions.

230V AC

Solution of the second of the secon

<sup>1</sup>... Operating the luminaires **without using switches**: The luminaires can only be switched to stand-by mode.

Operating the K-ZWALLY **with switches** (i.e. switches for lights <u>and</u> K-ZWALLY): the K-ZWALLY requires a start-up period of approximately five seconds each time it is switched on. Afterwards either the daylight sequence or the night lowering (between 23:30 and 05:00 for the "Residential" type) is active.

The K-ZWALLY can also be operated on a permanently powered basis.

<sup>2</sup> ... If the distance between the K-ZWALLY master and the first luminaire is greater than 7m or if there are apparent structural obstructions (e.g. walls) between the K-ZWALLY master and the first luminaire →

Recommended: Swap STEPS 1 and 2 (see Section 5)



### 2.1 Installation in a flush-mounted connector socket

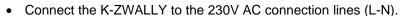


#### Danger due to electrical voltage!

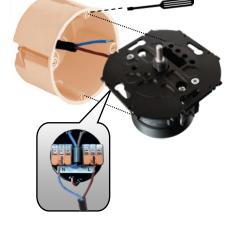


Before performing installation work on the K-ZWALLY, switch off the voltage to all components and the relevant circuit and check that they are voltage free.

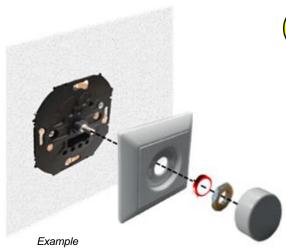
The power supply unit must not be removed or disassembled from the K-ZWALLY.



- To do this, connect the phase and neutral wire to both 3-pin terminals. Ensure that the connection lines are securely anchored in the terminals.
- If necessary, the 230 V AC supply can be looped through on the third three pin (e.g. a socket).
- Insert the K-ZWALLY into the flush-mounted junction box.
  - If the K-ZWALLY is flush to the wall: Fix the K-ZWALLY to the flush-mounted junction box using screws



## 2.2 Putting on the cover frame





- The cover is an optional accessory and is therefore not included in the scope of delivery
- The K-ZWALLY is designed for various switch programs
- The shaft diameter of the rotary potentiometer on the K-ZWALLY is 4mm. An adapter sleeve is available for a rotary knob with a 6mm shaft diameter.

#### **Assembly:**

- The cover frame is put on centrally on the K-ZWALLY.
- The hexagon nut is screwed tight using a wrench or combination pliers and the control knob is put on.



#### Information:

Only put on the cover frame and the control knob after network configuration (see Section 0).



## 3 NETWORK CONFIGURATION with the K-ZWALLY Master

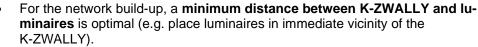


Creating the network is a **one-time process**.

Up to 200 luminaires can be logged in to the network of one K-ZWALLY Master.

Requirement: All NeoLink or ZigBee luminaires are ready for use, the K-ZWALLY is active.

Important indications:



→ The luminaires should be installed/mounted **only after** network build-up.

→ When the K-ZWALLY is active, the green status LED on the K-ZWALLY shines constantly.

- A maximum of **25 luminaires** can be logged in to the network of the K-ZWALLY **per run**. For a higher number of luminaires, proceed as follows:
  - If there are no luminaires logged in yet, switch on the first 25 luminaires.
     Switch off the remaining luminaires (current-free).
  - o Log in the first 25 luminaires (see right) to the network of the K-ZWALLY.
  - Leave the already logged in luminaires switched on after the first and each further run. Switch on the next maximum 25 luminaires and start the next run.

### Register luminaires to the K-ZWALLY Master – description of one run



#### STEP 1: Open network

Press for ≥ 5 seconds & release → The status LED flashes, the K-ZWALLY Master network is now opened for three minutes¹

<u>Attention:</u> As long as the network is open, the K-ZWALLY and all active luminaires must not be switched off (current-free)!









#### STEP 2: Automatic network login of the luminaires

NeoLink or ZigBee luminaires change their colour from neutral white (4000K) to green when logged in to the network of the K-ZWALLY Master.

After three minutes: network closes automatically → Status LED on the K-ZWALLY shines constantly.



Information: If all luminaires are in the network before the 3 minutes have expired  $\rightarrow$  Press for  $\geq$  5 seconds and release  $\rightarrow$  the Status shines constantly and the network is closed



#### STEP 3: Network check

Turn the K-ZWALLY → all luminaires in the network have to change their brightness

#### TROUBLESHOOTING

#### Not all of the luminaires have registered to the K-ZWALLY Master within 3 minutes:

- Switch off the luminaires and the K-ZWALLY for a few seconds (current-free) and switch them back on again (please note the start-up time of approximately five seconds for the K-ZWALLY)
- Reopen the network

Repeat these two steps a few times if necessary. If not all luminaires have registered in the network after repeating the process a few times, go to Section 5.

<sup>&</sup>lt;sup>1</sup> If you would like to set up several networks with several K-ZWALLY Masters, ensure that only one network is opened at one time. For each K-ZWALLY Master, only switch on those luminaires that should be assigned to this Wally (all other luminaires have to be current-free).



## 4 The K-ZWALLY during operation

## Features and functionality

After assembling/starting up the K-ZWALLY, it follows the natural course of daylight.<sup>2</sup> This means that the K-ZWALLY sends colour temperatures to the luminaires in the network automatically, time-of-day-dependent and continuously, which creates a sunlight characteristic.

In addition, colour temperatures between 1,800 K and 16,000 K and CIE-xy colours can be set manually using the K-ZWALLY. There is a smooth transition from 1,800 K to red.

Feature	Action on the K-ZWALLY and reaction of the luminaires		
Switching on and off <sup>4</sup>	<ul> <li>Switching the luminaires off/on by very short press of the control knob (OFF = luminaires in stand-by state) or by using the switch (recommended, OFF = luminaires in current-free state)</li> <li>After switching on, the luminaires activate their last settings. When the luminaires are switched off by the Wally and switched on again between 23:30 and 05:00, the luminaires automatically set a brightness level of 5% and a CCT of 1,800 K (night lowering).</li> <li>If K-ZWALLY and luminaires are turned off by the switch (current-free), the luminaires activate their last settings after switching on and then either change to daylight or to night lowering mode (brightness level 5% and 1,800 K between 23:30 and 05:00) after ca. 5 seconds.</li> </ul>		
Daylight mode  Can be activated with every  K-ZWALLY (Master and Slave)	<ul> <li>Start by turning on the K-ZWALLY using the switch<sup>3</sup> or by double-clicking         In the morning midday in the evening     </li> <li>Standard couse of daylight (for "workplace" applications): same colour temperature curve for each day of the year</li> <li>Seasonal-dependent course of daylight (for "residential" applications): depending on season/date, the curve is adapted every day</li> <li>Direct and indirect light (if available) are automatically controlled independently from each other (automatically by the K-ZWALLY).</li> </ul>		
Change of mode	Brightness and colour control are switched between by a short press on the knob (~0.5s).		
Change of brightness	1% 100%  1 rotation  Turning anticlockwise Turning clockwise	Lights with direct and indirect parts of light:  Both light parts can be controlled independently from each other both in brightness mode and colour mode.	
Change of colour	16,000K-1,800K	Simultaneously pressing and turning the control knob clockwisely controls the indirect light.  Simultaneously pressing and turning the control knob anticlockwisely controls the direct light.	

<sup>&</sup>lt;sup>2</sup> Depending on the item number ordered, the course of daylight either remains the same throughout the year or changes with the season.

<sup>&</sup>lt;sup>3</sup> Activating the K-ZWALLY using the switch starts the course of daylight after about 5 seconds.

<sup>&</sup>lt;sup>4</sup> The "night lowering" feature is contained in all K-ZWALLY products used for "Residential" applications.



## 5 SPECIAL APPLICATIONS & TROUBLESHOOTING

Situation	Description /	Solution / approach		
Issues for network build up	Luminaires do not register to K-ZWALLY	1. Disassemble the K-ZWALLY and connect the Europlug cable to the K-ZWALLY, ensuring that the cable length is sufficient  2. Now place the K-ZWALLY near the non-registered luminaires (< 7m from the luminaires!)  3. Build up the network, following the instructions in Section 0		
Additional K-ZWALLY(s)	In the existing network, an additional K-ZWALLY is required to control the luminaires (e.g. as a second	Requirement: The K-ZWALLY Master is active. The following steps must be performed for each K-ZWALLY Slave: Step 1: Connect the Europlug to the K-ZWALLY Slave Step 2: Connect the Europlug to the 230V AC supply		
	control element in the room).  The K-ZWALLY which owns the network is the K-ZWALLY Master. All additional K-ZWALLYs are designated as K-ZWALLY Slave(s).	Step 3:  K-ZWALLY Master  Press the K-ZWALLY Master for ≥ 5 seconds and release → Network is opened for 3 minutes  Step 4:  K-ZWALLY Slave  Short press on the left small PCB button on the K-ZWALLY Slave and release → The status LED switches off briefly and then shines constantly again. The K-ZWALLY Slave automatically logs in to the network.  Step 5:  K-ZWALLY Slave  Turn the K-ZWALLY slave → if the brightness of the luminaires changes, the K-ZWALLY Slave is in the network.  After 3 minutes, the network closes automatically.  After 3 minutes, the network closes automatically.  After 3 minutes, the network closes automatically.		
Network reset	The network needs to be reset if the installation is expanded, for example if a NeoLink Box is added.  When resetting the network, all NeoLink and ZigBee devices are reset to their factory state and deleted from the K-ZWALLY Master network.	<ol> <li>Switch on all the network members (K-ZWALLY and luminaires)</li> <li>Recommended: Set all luminaires to a bold colour (e.g. red). This will help you to see whether the reset has been successful.</li> <li>Perform the following steps:</li> <li>This will help you to see whether the reset has been successful.</li> <li>Perform the following steps:</li> <li>The properties of the properties of the</li></ol>		
New K-ZWALLY Master	The K-ZWALLY which owns the network is faulty and has to be replaced by a new K-ZWALLY.	Requirement: All network members must be reset (manual reset) before the network is built up with the new K-ZWALLY Master.  Perform the steps described in "Network reset" or contact a KITEO service technician!  After manually resetting all the luminaires and K-ZWALLY Slave(s), a new network can be created with the new K-ZWALLY Master.		
New or addi- tional lumi- naires(s)	Replacing or adding luminaires	Register the new luminaires in the K-ZWALLY Master network by following the instructions in Section 3 (note the range recommendations on page 2!).		

<sup>&</sup>lt;sup>4</sup> If the K-ZWALLY Slave registers in the K-ZWALLY Master network before 3 minutes have expired, the network can be closed manually: Press the K-ZWALLY Master for ≥ 5 seconds and release