

# RC2200DK-HCL

# RC2200DK-HCL ZigBee<sup>™</sup>-ready Demonstration Kit Quick Start



## Introduction

The RC2200DK-HCL demonstration kit shows a ZigBee<sup>™</sup>-ready home control lighting profile based on the Figure 8 Wireless Z-stack. To make the demonstration a minimum of two (optionally three) boards are used:

- 1. Switch Load Controller (SLC) configured as network coordinator
- 2. Switch Remote Control (SRC) configured as network router
- 3. A second Switch Remote Control (SRC) configured as network router (optional)

The kit contains two Demo Boards factory preconfigured and marked as SLC/C and SRC/R respectively.

To monitor the ZigBee network communication a "packet sniffer" application could be installed on a PC. However, this is not required to do a simple demonstration.



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# **Quick Start Guide**

#### 1. Set up the SLC as network coordinator

Simply turn on the power to the "SLC" board by plugging in the AC/DC battery adapter or connecting the 9V battery pack. The green LED close to the DC jack will light up when the power source is OK.

After a moment the orange LED will light up indicating that the coordinator is up and running.\*

The packet sniffer will show this event as one "Beacon request" transmission from the SLC. As no other nodes are present, there will not be any more activity in the network.

#### 2. Set up the SRC as network router and associate it to the coordinator

Turn on the power to the "SRC" board by plugging in the AC/DC battery adapter or connecting the 9V battery pack, and the green LED close to the DC jack will light up.

After a moment the orange LED will light up indicating that the router is up and running.\*

The packet-sniffer will show this event as several "Beacon request" transmissions from the SRC, and finally an "Association request". The SRC is now associated ("logged on") to the coordinator.

# 3. Make an end device binding between the SRC and the SLC

The devices need now to be bound. That is, one particular remote control ("switch") shall be bound to control one particular load controller ("lamp").

Push button number 5 ("BIND") on the SRC in order to initiate the binding process. Within 10 seconds push button number 5 ("BIND") on the SLC. The SRC will light up its green LED to indicate a successful binding.

(Repeat 2 and 3 above for the second SRC)

#### 4. Make an automatic end device binding by using service discovery

As an alternative to "manual" binding, an SRC can do an automatic binding to a device that accepts the message from the SRC. In this small demonstration network the SLC is the only such device. Push button 4 ("AUTOBIND") on the SRC in order to do this.

## 5. Turn the light (LED) on/off!

Pushing button number 6 ("ON/OFF") on the SRC will now turn on/off the light (the green LED at the SLC).

\*) If the yellow LED starts blinking after power on, this indicates that the MAC address has not been configured. This can then simply be done by setting the potentiometer (grey knob in the down right corner) in a random position and press push button number 1 ("MAC-ADDR). This random MAC address is then stored in the internal EEPROM and will be used the next time the board is reset or powered up.

## **Contact Information**

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