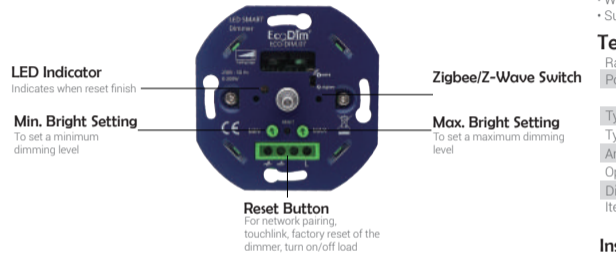


# Smart Dimmer Switch 200W LED Item No. Eco.Dim-07



The Smart Dimmer is a switch multi level device based on Z-wave Plus and Zigbee 3.0 protocol. The Dimmer controller can be included and operated in certified Zigbee network and Z-Wave network from other manufacturers.

In addition, the LED dimmer has a wide range (0-200W LED), excellent dimmability and light stability (MIN and MAX adjustment) and all brands of cover material in NL & BE fit on the built-in element.

Suitable for > 90% of all (normal) dimmable LED lamps. Of course also to be used if you do not yet have an app or home automation system. The dimmer is delivered incl. Clear Dutch manual. In short, a very complete and unique product and a world first!



## Features:

- Dual mode AC phase cut dimmer based on latest ZigBee 3.0 and Z-Wave plus protocol
- Supports resistive loads and capacitive loads, Dimming from 0 to 200W(LED), max 300w for Inc. & Hal
- Compatible with popular gateway products, such as Philips Hue, Amazon Echo Plus, Google Home, Fibaro, etc.
- Without Neutral Required, suitable for retrofitted house.
- Supports the Over The Air (OTA) feature for the product's firmware upgrade.

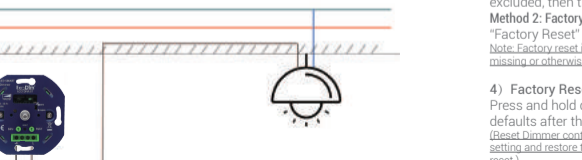
## Technical Data

Rated input voltage	220-240 Vac, 50Hz
Power range*	0-200W LED
	10-300W Incandescent/Halgen
Type of load	LED Retrofit   Incandescent-halogen
Type dimmer	R,C trailing edge
Ambient temperature (Ta)	35 °C
Operation	Press and rotary
Dimension	70.6x70.6x33mm
Item weight	g

## Installation Guide

Important: Read All Instructions Prior to Installation  
 • DO NOT install with power applied to device.  
 • DO NOT expose the device to moisture.

### 1. Wiring



## PLEASE NOTE:

1. This is a two-wire dimmer and service to be connected as shown in the diagram above
2. The installation of the dimmer on a mains current of 230V should be performed by a qualified professional, taking into account the national rules. Make sure that the electricity is in all work switched off.
3. You can't connect more than one dimmer in parallel to operate the same charge from two points

## 2. Operation

1) **Select the communication mode:** When the power is off, turn the switch on the right side of the metal plate to your preference. Then turn on the Power.

2) **Included the dimmer to Zigbee or Z-Wave network.**

- Remove the device from previous zigbee network if it has already been added to, otherwise pairing will fail. Please refer to the part "Factory Reset Manually".
- Set primary controller/gateway into inclusion mode (If you don't know how to do this, Please refer to your primary controller's manual on how to turn your controller into inclusion mode).
- Power on the dimmer controller, press and hold down the reset button for over 4 seconds, it will set the dimmer controller into inclusion mode.

3) **Excluded the dimmer to Zigbee or Z-Wave network.**

- There are two exclusion methods:
- Method 1: Exclusion from the primary controller/gateway.**
- Set the primary controller/gateway into exclusion mode (Please refer to your primary controllers manual on how to set your controller into exclusion).
  - Twice press the reset button, the dimmer will be set to exclusion mode, and waiting to be excluded, then the dimmer will be excluded from the network.
- Method 2: Factory reset the dimmer will force it to be excluded from a network.** (please refer to the part "Factory Reset" of this manual)

Note: Factory reset is not recommended for exclusion. please use this procedure only if the primary controller/gateway is missing or otherwise inoperable.

4) **Factory Reset**

Press and hold down reset button for over 4 seconds, the dimmer controller will be reset to factory defaults after the BLUE LED Indicator blink.  
 (Reset Dimmer controller to factory default settings will sets the Dimmer to not in z-wave network state. delete the Association setting and restore the Configuration setting to the default. The Dimmer controller will start Smart Start Inclusion when it is reset.)

## 5) Z-Wave Smart Start Inclusion

- The Dimmer has a DSK string, you can key in first five digit to increment smart start process, or you can scan QR code.  
 Ex: 65286-19008-32952-20593- 44872-18102-41266-46651
- SmartStart enabled products can be added into a Z-Wave network by scanning the Z-Wave QR Code present on the product with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity.  
 Note: The QR code can be found on the back of the Smart dimmer.

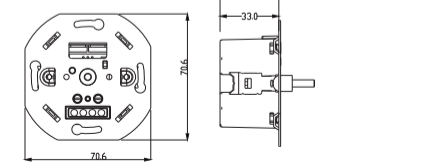
6) **OTA**

The device supports firmware updating through OTA, and will acquire new firmware from zigbee controller or hub every 10 minutes automatically.

## 3. Setting

- To make the cord dimmer work optimally, you can adjust the lamps optimally to the dimmer with the MIN and MAX adjustment.
- **Set MIN:** You switch on the lights with the push / turn button. When the lights are on, put a screwdriver in the MIN and turn to the left. When the light becomes unstable, turn a little further to the right so that the light remains stable.
  - **Set MAX:** You switch on the lamps with the push / turn button. When the lights are on, put a screwdriver in the MAX and turn to the right. When the light becomes unstable, turn a little further to the left so that the light remains stable.

## 4. Dimension



## Index

### 1. ZigBee Clusters the device supports are as follows:

- 0x0000: Basic
- 0x0003: Identify
- 0x0004: Groups
- 0x0005: Scenes
- 0x0006: On/off
- 0x0008: Level Control
- 0x0b05: Diagnostics
- 0x0019: OTA
- 0x0021: Green Power

### 2. Z-Wave Security and non-Security features

- 1) The function of the Dimmer as a security and non-security device is identical.
- 2) When a node includes into a S0 or S2 Z-Wave network, the node supports S0 or S2 unauthenticated class, S2 authenticated and so do the supported CCs.
- 3) Commands list

Network Type	Included Non-Secure Network	Included Secure Network
Non-secure supported Command Classes	COMMAND_CLASS_ZWAVEPLUS_INFO_V2 COMMAND_CLASS_VERSION_V2 COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2 COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1 COMMAND_CLASS_ASSOCIATION_V2 COMMAND_CLASS_POWERLEVEL_V1 COMMAND_CLASS_SWITCH_MULTILEVEL_V2 COMMAND_CLASS_CONFIGURATION_V1 COMMAND_CLASS_FIRMWARE_UPDATE_MD_V4 COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1 COMMAND_CLASS_SECURITY_V1 COMMAND_CLASS_SECURITY_V2_V1 COMMAND_CLASS_SECURITY_V1 COMMAND_CLASS_TRANSPORT_SERVICE_V2 COMMAND_CLASS_SUPERVISION_V1	COMMAND_CLASS_ZWAVEPLUS_INFO_V2 COMMAND_CLASS_TRANSPORT_SERVICE_V2 COMMAND_CLASS_SECURITY_V2_V1 COMMAND_CLASS_SECURITY_V1 COMMAND_CLASS_SUPERVISION_V1
Security Supported Report Command Classes		COMMAND_CLASS_VERSION_V2 COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2 COMMAND_CLASS_ASSOCIATION_GRP_INFO_V1 COMMAND_CLASS_ASSOCIATION_V2 COMMAND_CLASS_POWERLEVEL_V1 COMMAND_CLASS_SWITCH_MULTILEVEL_V2 COMMAND_CLASS_CONFIGURATION_V1 COMMAND_CLASS_FIRMWARE_UPDATE_MD_V4 COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1 COMMAND_CLASS_SUPERVISION_V1

## 3. Z-Wave Command

- 1) SDK: 6.81.03
- 2) Library
  - Basic Device Class: BASIC\_TYPE\_ROUTING\_SLAVE
  - Generic Device class: GENERIC\_TYPE\_SWITCH\_MULTILEVEL
  - Specific Device Class: SPECIFIC\_TYPE\_POWER\_SWITCH\_MULTILEVEL
- 3) Z-Wave Plus Device Type

Device Type	Basic Device Attribute	Specific Device Attribute	Role Type
Light Dimmer Switch	GENERIC_TYPE_SWITCH_MULTILEVEL	SPECIFIC_TYPE_POWER_SWITCH_MULTILEVEL	Always On Slave (AOS)

4) Note for special commands

### 3.4.1 Z-Wave Plus Info Command Report

Parameter	Value
Z-Wave Plus Version	V1
Role Type	ZWAVEPLUS_INFO_REPORT_ROLE_TYPE_SLAVE_ALWAYS_ON
Node Type	ZWAVEPLUS_INFO_REPORT_NODE_TYPE_ZWAVEPLUS_NODE
Installer Icon Type	ICON_TYPE_GENERIC_LIGHT_DIMMER_SWITCH
User Icon Type	ICON_TYPE_GENERIC_LIGHT_DIMMER_SWITCH

### 5) Association Command

The Dimmer supports 1 association group.

Grouping Identifier	Max Nodes	Transmit Content
Group 1	0x05	1. Device Reset Locally. 2. Switch Multilevel Report. The Dimmer will send Switch Multilevel Report when Dimmer state changed(Configurable). 3. Basic Report. The Dimmer will send Basic Report when Dimmer state changed(Configurable).

### 6) Association Group Info Command

a. Association Group Name Command Report

Team No.	Value
Group 1	The ASSIC of Lifeline: 4C 69 66 65 6C 69 6E 65

b. Association Group Info Command Report

Parameter	Team No.	Value
Profile	Group 1	General: Lifeline, Profile MSB=0x00, Profile LSB=0x01

### c. Association Group Command List Command Report

Team No.	Command List Support	
Group 1	COMMAND_CLASS_SWITCH_MULTILEVEL (0x26)	SWITCH_MULTILEVEL_REPORT (0x03)
	COMMAND_CLASS_DEVICE_RESET_LOCALLY(0x5A)	DEVICE_RESET_LOCALLY_NOTIFICATION(0x01)

### 7) Basic Command

Basic CC is maps to Multilevel CC.

### 8) Configuration Command Parameters

The Dimmer offers a wide variety of advanced configuration settings. Below parameters can be accessed from main controllers configuration interface.

Parameter	Size	Default Value	Description
1 (0x01)	1	0x00	State After Power Restored: The state the switch should return to once power is restored after power failure. 0 - Off. 1 - On. 2 - Returns to level before Power Outage
2 (0x02)	1	0x01	Notification when Load status change: The Dimmer will send notification to associated device (Group Lifeline) when the status of Dimmer load is changed. 0 - The function is disabled. 1 - Send Switch Multilevel Report. 2 - Send Switch Multilevel Report only when Load status is not changed by Z-WAVE Command.

## 4. Z-Wave QR CODE

1 DSK  
 You scan the QR code with an android phone. For example, The QR returns this number:  
 900112034129447151845706002418050469410587456993035100100435301536022000927015460003400518( The data for each Dimmer is different)

The DSK is: 44715-18457-06002-41805-04694-10587-45699-30351.

Note: If your controller does not support SmartStart inclusion, please refer to the manual for your controller for non-SmartStart inclusion.  
 2 Quick Response Code (QR Code)  
 The first 16 bytes of the ECDH Public Key and sometimes additional information is encoded into a

## QR Code graphic.

When referred to in this document, "DSK" applies to the Full DSK, the combination of Full DSK and QR Code or the combination of Pin Code and QR Code. The QR code can be found on the side of the Dimmer or the DSK may be located on the back of the packaging.

## EcoDim

**Dr. Huber Noodtstraat 89a**  
**7001 DV Doetinchem**  
**Tel: +31 314 840165**  
**E-mail: info@ecobright.nl**



8 719322 371010