



TM



LUXY[®]

smart switch

EN The Luxy Smart Switch is the world's first switch that is a light itself. It gently illuminates in 16 million colours and can be used standalone as a switch to turn on/off the light connected to it and as an ambient light for a gentle illumination of your home. You can also use it as a smart home device and enjoy plenty of other functionalities it offers.

PACKAGE CONTENTS

Luxy Smart Switch, glass frame, mounting frame with claws, installation manual and S2 DSK label

INSTALLATION

1. To prevent electrical shock and/or equipment damage, disconnect electrical power at the main fuse or circuit breaker before installation and maintenance.
2. Be aware that even if the circuit breaker is off, some voltage may remain in the wires — before proceeding with the installation, be sure no voltage is present in the wiring.
3. Take extra precautions to avoid accidentally turning on the device during installation.
4. Connect the device exactly according to the diagram.
5. Place the antenna as far as possible from metal elements as they may cause signal interference.
6. Do not shorten the antenna.

Epilepsy warning! This product can trigger epileptic seizures, especially with photosensitive people.

Danger of electrocution!

Installation of this device requires a great degree of skill and may be performed only by a licensed and qualified electrician. Please keep in mind that even when the device is turned off, voltage may still be present in the device's terminals.

Note!

Do not connect the device to loads exceeding the recommended values. Connect the device exactly as shown in the provided diagrams. Improper wiring may be dangerous and result in equipment damage.

Electrical installation must be protected by directly associated overcurrent protection fuse 10 A, gG or Time lag T, rated breaking capacity 1500 A (ESKA 522.727) must be used according to wiring diagram to achieve appropriate overload protection of the device. The fuse must be installed in fuse holder type: Adele contact 503Si/1 DS according to the standard IEC60669-2-1.

Z-WAVE™ INCLUSION

SMARTSTART INCLUSION

1. Scan QR code on device label and add S2 DSK to Provisioning List in gateway (hub).
2. Connect the device to the power supply.
3. Make sure the device is within direct range of your Z-Wave gateway (hub).
4. Inclusion will be initiated automatically within few seconds of connection to the power supply and the device will automatically enrol in your network (when the device is excluded and connected to the power supply it automatically enters the LEARN MODE state).

MANUAL INCLUSION

1. Enable add/remove mode on your Z-Wave gateway (hub).
2. Connect the device to the power supply.
3. Make sure the device is within direct range of your Z-Wave gateway (hub).
4. Press once on button 3 – right. One press on button 4 – down for enabling full white. When full white is enabled, press, and hold button 3 – right, between 4 and 6 seconds. After 6 seconds, the device starts flashing green (1 second ON, 0.5 second OFF). Once the device receives node ID (after 10 seconds), it stops flashing and turns full green. The procedure is always available.

Note: in case of S2 Security inclusion a dialog will appear prompting you to enter the corresponding PIN number (5 underlined digits) that are written on the module label and the label inserted in the packaging (check the example picture). IMPORTANT: The PIN code must not be lost.

Z-WAVE EXCLUSION/RESET

Z-WAVE EXCLUSION

1. Connect the device to the power supply.
2. Make sure the device is within direct range of your Z-Wave gateway (hub) or use a hand-held Z-Wave remote to perform exclusion.
3. Enable exclusion mode on your Z-Wave gateway (hub).
4. Press once on button 3 – right. One press on button 4 – down for enabling full white. When full white is enabled, press, and hold button 3 – right for 5 seconds. After 5 seconds, the device starts flashing red 1 second ON, 0.5 second OFF.

Once the device loses node ID (after 10 seconds), it stops flashing and turns full red. The procedure is always available.

NOTE: LEARN MODE state allows the device to receive network information from the controller.

FACTORY RESET

1. Connect the device to the power supply
2. Press once on button 3 – right. One press on button 4 – down for enabling full white. When full white is enabled, press and hold button 5 – left for 10 seconds. After 10 seconds, the device starts flashing blue 1 second on, 0.5 second off.

After 10 seconds the device stops flashing and turns full blue. The procedure is available always. By resetting the device, all custom parameters previously set on the device will return to their default values, and a node ID will be deleted. Use this reset procedure only when the gateway (hub) is missing or otherwise inoperable.

NOTE: See extended manual for custom settings and parameters available for this device.

IMPORTANT DISCLAIMER

Z-Wave wireless communication is not always 100 % reliable. This device should not be used in situations in which life and/or valuables are solely dependent on its functioning. If the device is not recognized by your gateway (hub) or shows up incorrectly, you may need to change the device type manually and make sure your gateway (hub) supports Z-Wave Plus™ devices. Contact us for help before returning the product: <http://qubino.com/support/#email>

WARNING

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available. If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being. When replacing old appliances with new ones, the retailer is legally obligated to take back your old appliance for disposal free of charge. **This user manual is subject to change and improvement without prior notice.**

EN



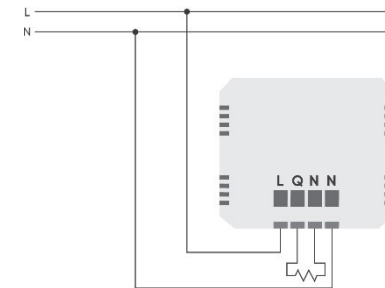
FUNCTIONALITIES

Touch-button specification:

Nr. 1 (CENTER)	Turns ON/OFF the room light or other load connected to it
No. 2 (Up)	Turns ON/OFF the Luxy light
No. 3 (Right)	Switches between 4 different lighting effects (ocean, sunrise, rainbow, and nature)
No. 4 (Down)	Turns ON/OFF the white light on the Luxy
No. 5 (Left)	Starts the colour spectrum and stops at the colour you wish to have

EN

ELECTRICAL DIAGRAM (110 – 240 Vac)



Legend for diagram:

L	Live (line) wire input
Q	Output terminal
N	Neutral output
N	Neutral input/ Entrée du neutre

We recommend using Wago 221-413 splicing connectors when operating with 240 Vac.

EN

TECHNICAL SPECIFICATIONS

Power supply	100- 240 Vac ±10 %/50/60 Hz
Rated load current of output (resistive load) *	1 x 10 A
Operation temperature	-10 ° ~ +40 °C
Z-Wave operation range	up to 40 m indoors
Colours	16 - million
Luminance	1090 cd/m ²
Standby/max. consumption	0,5 W / 1,5 W
Installation in boxes	Ø ≥ 60 mm / 2M or 3M
Z-Wave Repeater	Yes/Oui/Ja/Ja

Dimensions (WxHxD) (with packaging)	93x90x45 mm / (149x136x53 mm)
Weight (including glass frame)(with packaging)	114 g / (230 g)

CONFIGURATION PARAMETERS

Parameter no. 1 – Relay contact type

Defines the contact type when open/closed contact.

Values (size is 1-byte dec):

- Default value 0
- 0 - NO (normally open) output type
- 1 - NC (normally close) output type

Parameter no 3. – turning off alarming

Values (size is 1-byte dec):

- Default value 1

- 0 – only by Z-Wave command (basic set, switch multilevel set, switch multilevel start/stop level change, switch color set, switch color start/stop level change, notification report idle)

- 1 – capacitive input (up, down, left, right) or Z-Wave command (basic set, switch multilevel set, switch multilevel start/stop level change, , switch color set, switch color start/stop level change, notification report idle)

Parameter no. 10. – auto on timer

Defines the time after which the device is turned to last known state.

Values (size is 1-byte dec):

- Default value 0
- 0 – disabled
- 30 – 32535 = 30 – 32535 seconds after which the device turns on

Parameter no. 11. – auto off timer

Defines the time after which the device is turned to last known state.

Values (size is 2-byte dec):

- Default value 0
- 0 – disabled
- 30 – 32535 = 30 – 32535 seconds after which the device turns off

Parameter no. 12. – auto on timer relay

Defines the time after which the device's relay is turned to last known state.

Values (size is 2-byte dec):

- Default value 0
- 0 – disabled
- 30 – 32535 = 30 – 32535 seconds after which the device turns on

Parameter no. 13. – auto off timer relay

Defines the time after which the device's relay is turned to last known state.

Values (size is 2-byte dec):

- Default value 0
- 0 – disabled
- 30 – 32535 = 30 – 32535 seconds after which the device turns off

Parameter no. 30. – restore state on power failure

Values (size is 1-byte dec):

- Default value 1
- 1 – enabled (the device will restore state on power failure)
- 0 – disabled (the device will not restore state on power failure and will remain off)

Parameter no. 31. – restore relay state on power failure

Values (size is 1-byte dec):

- Default value 1
- 1 – enabled (the device will restore state on power failure)
- 0 – disabled (the device will not restore state on power failure and will remain off)

Parameter no. 40 – Watt Power Consumption Reporting Threshold for Load

Choose by how much power consumption needs to increase or decrease to be reported. Values correspond to percentages so if 10 is set (by default), the device will report any power consumption changes of 10 % or more compared to the last reading.

Values (size is 2-byte dec):

- Default value 10
- 0 - Power consumption reporting disabled
- 1 - 100 = 1 % - 100 % Power consumption reporting enabled. New value is reported only when Wattage in real time changes by more than the percentage value set in this parameter compared to the previous Wattage reading, starting at 1 % (the lowest value possible).

NOTE: Power consumption needs to increase or decrease by at least 1 Watt to be reported, REGARDLESS of percentage set in this parameter.

Parameter no. 42 – Watt Power Consumption Reporting Time Threshold for Load

Set value refers to the time interval with which power consumption in Watts is reported (0 – 32535 seconds). If 300 is entered (by default), energy consumption reports will be sent to the gateway (hub) every 300 seconds (or 5 minutes).

Values (size is 2-byte dec):

- Default value 0
- 0 - Power consumption reporting disabled
- 30 - 32535 = 30 - 32535 seconds. Power consumption reporting enabled. Report is sent according to time interval (value) set here.

Parameter no. 60 – Lock touch for relay only

This parameter enables ONLY the touch functionality for closing/opening the relay meant for switching ON/OFF the connected light or any other connected load. See chapter 5.4 for additional information.

Values (size is 1-byte dec):

- Default value 0
- 0 – disabled
- 1 – enabled (the user can switch ON/OFF the connected light or any other connected load by touching ANY button. Other functionalities (lighting mode, scenes, dimming and

full white, inclusion/exclusion and reset) are unavailable until function disabled).

Parameter no. 70 - Overload safety switch

The function allows for turning off the controlled device in case of exceeding the defined power for more than 5 sec. Controlled device can be turned back on by capacitive antenna/s or sending a control frame.

Values (size is 2-byte dec):

- Default value 2300
- 0 = function not active
- 1 – 2300 = 1 W – 2300 W

① NOTE: This functionality is not an overload safety protection, please check chapter “Functionalities” for more details.

In case of overload the following message will be send towards the controller:

COMMAND_CLASS_NOTIFICATION_V5

The Alarm V1 type field set to 0x00

Notification Type 0x08 and 0x08 (Overload detected)

IMPORTANT

When adding the Luxy Smart Switch to a Z-Wave network with a controller supporting Security 2 (S2), the PIN code of the Z-Wave Device Specific Key (DSK) is required. The unique DSK code is printed on the product label and a copy is inserted in the packaging, which must not be lost. Do not remove the DSK from the product. As a backup measure, use the label in the packaging. The first five digits of the key are highlighted or underlined to help the user identify the PIN code portion of the DSK text. The DSK is additionally represented with a QR Code.

STATEMENT OF PRODUCTS FORM MULTIPLE MANUFACTURES

This product can be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers. All mains operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

ASSOCIATIONS

Group ID	Name	Maximum allowed nodes	Description
1	Lifeline	1	Supports following commands: COMMAND_CLASS_DEVICE_RESET_LOCALLY, DEVICE_RESET_LOCALLY_NOTIFICATION - triggered upon reset, COMMAND_CLASS_SWITCH_MULTILEVEL_V4, SWITCH_MULTILEVEL_REPORT_V4 - triggered upon change of brightness, COMMAND_CLASS_SWITCH_COLOR_V3, SWITCH_COLOR_REPORT_V3 - triggered upon change of color, COMMAND_CLASS_NOTIFICATION_V8, NOTIFICATION_REPORT_V8 - triggered upon change of alarm detection state or upon current overload detection, COMMAND_CLASS_SWITCH_BINARY, SWITCH_BINARY_REPORT - is triggered when a change of output state of relay occurs. COMMAND_CLASS_METER, METER_REPORT - triggered upon energy consumption change according to configuration parameters 40 and 42. CONFIGURATION_REPORT – triggered upon a local change of the working mode of the four capacitive buttons (see chapter 5.4) Reserved for communication with the primary gateway/hub. Used to report unsolicited messages to the controller.
2	LEDs on/off	5	Supports the following command: COMMAND_CLASS_BASIC_V2, BASIC_SET_V2 - is triggered when a change of output state occurs; LEDs are on/off.
3	Change of brightness	5	Supports the following command: COMMAND_CLASS_SWITCH_MULTILEVEL_V4, SWITCH_MULTILEVEL_SET_V4 - is triggered when a change of output state occurs; brightness changes.
4	Change of color	5	Supports the following command: COMMAND_CLASS_SWITCH_COLOR_V3, SWITCH_COLOR_SET_V3 - is triggered when a change of output state occurs; colour changes.
5	Relay on/off	5	Supports the following command: COMMAND_CLASS_BASIC_V2, BASIC_SET_V2 - is triggered when a change of output state of relay occurs.

Endpoint 1 (LEDs):

Group ID	Name	Maximum allowed nodes	Description
----------	------	-----------------------	-------------

1	Lifeline	0	Supports following commands: COMMAND_CLASS_NOTIFICATION_V8, NOTIFICATION_REPORT_V8 - triggered upon change of alarm detection state COMMAND_CLASS_SWITCH_MULTILEVEL_V4, SWITCH_MULTILEVEL_REPORT_V4 - is triggered when a change of output state occurs, brightness changes COMMAND_CLASS_SWITCH_COLOR_V3, SWITCH_COLOR_REPORT_V3 - triggered upon change of brightness,
2	LEDs on/off	5	Supports the following command: COMMAND_CLASS_BASIC_V2, BASIC_SET_V2 - is triggered when a change of output state occurs; LEDs are on/off.
3	Change of brightness	5	Supports the following command: COMMAND_CLASS_SWITCH_MULTILEVEL_V4, SWITCH_MULTILEVEL_SET_V4 - is triggered when a change of output state occurs; brightness changes.
4	Change of color	5	Supports the following command: COMMAND_CLASS_SWITCH_COLOR_V3, SWITCH_COLOR_SET_V3 - is triggered when a change of output state occurs; colour changes.

Endpoint 2 (Relay):

Group ID	Name	Maximum allowed nodes	Description
1	Lifeline	0	Supports following commands: COMMAND_CLASS_NOTIFICATION_V8, NOTIFICATION_REPORT_V8 - triggered upon current overload detection, COMMAND_CLASS_SWITCH_BINARY, SWITCH_BINARY_REPORT - is triggered when a change of output state of relay occurs. COMMAND_CLASS_METER, METER_REPORT - triggered upon energy consumption change according to configuration parameters 40, 42
2	Relay on/off	5	Supports the following command: COMMAND_CLASS_BASIC_V2, BASIC_SET_V2 - is triggered when a change of output state of relay occurs.

NOTIFICATION COMMAND CLASS

The Luxy Smart Switch supports the following notification types and events:

Notification Type	Notification Event
Siren (0x0E)	Siren active (0x01)
Power Management (0x08)	Over-load detected (0x08)

Siren

The device sends a NOTIFICATION_REPORT, with the listed type and event, when it receives a NOTIFICATION_REPORT.

The device can behave in one of two ways:

- When it receives a NOTIFICATION_REPORT(notificationType=0x08=POWER_MANAGEMENT) the device will start blinking with a yellow color.
- When the device receives any other NOTIFICATION_REPORT, it will start blinking with a red color.

The device will continue to do so, until the user puts it back into its default state, which can be done either with Z-Wave command or by physically touching the buttons of the device, so that a change of output state occurs. There is some control of this behaviour, described in the configuration parameters no. 3. When the device receives notification report with State Idle (0x00), it will change state to Idle and stop signaling alarmed state (LEDs stop blinking).

Power Management

In case of exceeding the power value set in parameter 70 Overload safety switch (default 2300 W) for more than 5 seconds, the Luxy Smart Switch automatically turns off the output and the overload notification is sent (0x08 Overload detected).

In case the parameter 70 is disabled the Luxy smart switch has a fixed overload safety value of 2400 W to prevent any damage to the module. In this case if the active power is greater than 2400 W for 5 seconds or more, the output is turned off automatically and the overload notification is sent (0x08 Over-load detected).

Z-WAVE COMMAND CLASSES

ROOT ENDPOINT (LED control):

Device Classes:

GENERIC_TYPE_SWITCH_MULTILEVEL (0x11)
SPECIFIC_TYPE_COLOR_TUNABLE_MULTILEVEL (0x02)

Supported Z-Wave Command Classes:

COMMAND_CLASS_ZWAVEPLUS_INFO_V2
COMMAND_CLASS_SUPERVISION_V1
COMMAND_CLASS_TRANSPORT_SERVICE_V2
COMMAND_CLASS_SECURITY_2_V1
COMMAND_CLASS_SWITCH_COLOR_V3 [S2]*

COMMAND_CLASS_ASSOCIATION_V2 [S2]*
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3 [S2]*
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3 [S2]*
COMMAND_CLASS_VERSION_V2 [S2]*
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2 [S2]*
COMMAND_CLASS_DEVICE_RESET_LOCALLY_V1 [S2]*
COMMAND_CLASS_POWERLEVEL_V1 [S2]*
COMMAND_CLASS_SWITCH_MULTILEVEL_V4 [S2]*
COMMAND_CLASS_SWITCH_BINARY_V1 [S2]*
COMMAND_CLASS_BASIC_V2 [S2]*
COMMAND_CLASS_METER_V4 [S2]*
COMMAND_CLASS_CONFIGURATION_V1 [S2]*
COMMAND_CLASS_NOTIFICATION_V8 [S2]*
COMMAND_CLASS_MULTI_CHANNEL_V4 [S2]*

ENDPOINT 1 (LED control):

Device Classes:

GENERIC_TYPE_SWITCH_MULTILEVEL (0x11)
SPECIFIC_TYPE_COLOR_TUNABLE_MULTILEVEL (0x02)

Supported Z-Wave Command Classes:

COMMAND_CLASS_ZWAVEPLUS_INFO_V2
COMMAND_CLASS_SUPERVISION_V1
COMMAND_CLASS_SECURITY_2_V1
COMMAND_CLASS_SWITCH_COLOR_V3 [S2]*
COMMAND_CLASS_ASSOCIATION_V2 [S2]*
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3 [S2]*
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3 [S2]*
COMMAND_CLASS_SWITCH_MULTILEVEL_V4 [S2]*
COMMAND_CLASS_SWITCH_BINARY_V1 [S2]*
COMMAND_CLASS_BASIC_V2 [S2]*
COMMAND_CLASS_METER_V4 [S2]*
COMMAND_CLASS_NOTIFICATION_V8 [S2]*

ENDPOINT 2 (built-in relay control)

Device Classes:

GENERIC_TYPE_SWITCH_BINARY (0x10)
SPECIFIC_TYPE_POWER_SWITCH_BINARY (0x01)

Supported Z-Wave Command Classes:

COMMAND_CLASS_ZWAVEPLUS_INFO_V2
COMMAND_CLASS_SUPERVISION_V1
COMMAND_CLASS_SECURITY_2_V1
COMMAND_CLASS_ASSOCIATION_V2 [S2]*
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3 [S2]*
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V3 [S2]*
COMMAND_CLASS_SWITCH_BINARY_V1 [S2]*
COMMAND_CLASS_BASIC_V2 [S2]*
COMMAND_CLASS_METER_V4 [S2]*
COMMAND_CLASS_NOTIFICATION_V8 [S2]*

***[S2] Security S2 Command Class**

① NOTE: This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from any other manufacturers. All constantly powered nodes in the same network will act as repeaters regardless of the vendor to increase reliability of the network.

① NOTE: This device must be used in conjunction with a Security Enabled Z-Wave Controller to fully utilize all implemented functions.

① NOTE: This device is a security enabled Z-Wave Plus product that can use encrypted Z-Wave Plus messages to communicate to other security enabled Z-Wave Plus products.

① NOTE: DSK access via UI

Gateways, which implement the S2 and Smart Start security feature, display an input dialog box, with a full or partial DSK key. Most of them display a partial DSK (they do not show the PIN code) when the device is included with the S2-Authenticated security scheme. When included with the S2-Unauthenticated, some gateways show the complete DSK while others perform the complete inclusion process without prompting the user with the dialogue.

① NOTE: MAPPING OF COMMAND_CLASS_BASIC

The COMMAND_CLASS_BASIC is mapped into COMMAND_CLASS_SWITCH_MULTILEVEL, on the root endpoint and endpoint1. On endpoint2, COMMAND_CLASS_BASIC is mapped into COMMAND_CLASS_SWITCH_BINARY, for enabling relay control:

On the root endpoint and endpoint1, the 4 LEDs will be turned ON or OFF after receiving the BASIC_SET command:

- they will be turned on, when the device receives a BASIC_SET(Value=0x01-0x063) (1-99%)
- they will be turned on to the last non-zero value, when the device receives a BASIC_SET(Value=0xFF)
- they will turn off, when the device receives a BASIC_SET(Value=0x00)

On endpoint2, the relay will be turned ON or OFF, after receiving the BASIC_SET command:

- the relay will be turned on, when the device receives a BASIC_SET(Value=0x01-0x063) (1-99%)
- the relay will also turn on, when the device receives a BASIC_SET(Value=0xFF)
- the relay will turn off, when the device receives a BASIC_SET(Value=0x00)

① NOTE: Answering on a METER_GET_V1 command:

When the device receives a METER_GET_V1 command, it will answer with a METER_REPORT_V4, with the field values rateType=1 and scale=0 (kWh).

EN

ORDERING CODE AND FREQUENCIES

ZMNKAXY – X, Y values define product version per region. Please check online extended manual or catalogue for the right version.

EN

Get a real Qubino Z-Wave bible! How-to install, use cases, illustrations and more. Scan the QR code/follow the link below:

luxy.qubino.com/smart-switch



GOAP d.o.o. Nova Gorica

Ulica Klementa Juga 007, 5250 Solkan, Slovenia

E-mail: info@qubino.com; Tel: +386 5 335 95 00

Web: www.qubino.com; Date: 19.06.2020; V 1.1.4