## Nice On/Off-Control

## Turning electrical devices on/off remotely

EN - Instructions and warnings for installation and use

## WARNINGS AND GENERAL PRECAUTIONS

- CAUTION! - This manual contains important instructions and warnings for personal safety. Carefully read all parts of this manual. If in doubt, suspend installation immediately and contact Nice Technical Assistance.
- CAUTION! - Important instructions: keep this manual in a safe place to enable future product maintenance and disposal procedures.
- CAUTION! - All installation and connection operations must be performed exclusively by suitably qualified and skilled personnel with the unit disconnected from the mains power supply.
- CAUTION! - Any use other than that specified herein or in environmental conditions other than those stated in this manual is to be considered improper and is strictly forbidden!
- The product's packaging materials must be disposed of in full compliance with local regulations.
- Never apply modifications to any part of the device. Operations other than those specified may only cause malfunctions. The manufacturer declines all liability for damage caused by makeshift modifications to the product.
- Never place the device near to sources of heat and never expose to naked flames. These actions may damage the product and cause malfunctions.
- This product is not intended for use by people (including children) with reduced physical, sensory or mental capabilities or who lack experience and knowledge, unless they have been given supervision or instruction concerning the use of the product by a person responsible for their safety.
- Make sure that children do not play with the product.
- The device is designed to operate in electrical home installation. Faulty connection or use may result in fire or electric shock.
- Even when the device is turned off, voltage may be present at its terminals. Any maintenance introducing changes into the configuration of connections or the load must be always performed with disabled fuse.


## PRODUCT DESCRIPTION

On/Off-Control is designed to be installed in standard wall switch boxes or anywhere else where it is necessary to control electric devices. On/Off-Control allows to control connected devices either via the Z-Wave Plus ${ }^{T M}$ network or via a switch connected directly to it and is equipped with active power and energy consumption metering functionality.

## Main features of On/Off-Control:

- Compatible with any Z-Wave ${ }^{T M}$ or Z-Wave Plus ${ }^{\text {TM }}$ Controller,
- Supports protected mode (Z-Wave network security mode) with AES-128 encryption,
- Advanced microprocessor control,
- Active power and energy metering functionality,
- Works with various types of switches - momentary, toggle, three-way, etc,
- To be installed in wall switch boxes of dimensions allowing for installation, conforming to provisions of applicable regulations,
- On/Off-Control is an extension unit.


## On/Off-Control is a fully compatible Z-Wave Plus ${ }^{\text {™ }}$ device.

This device may be used with all devices certified with the Z-Wave Plus certificate and should be compatible with such devices produced by other manufacturers. All non-battery operated devices within the network will act as repeaters to increase reliability of the network. The device is a Security Enabled Z-Wave Plus product and a Security Enabled Z-Wave Controller must be used in order to fully utilize the product.

## SUPPORTED LOADS

A Applied load and On/Off-Control itself may be damaged if the applied load is inconsistent with the technical specifications!

## On/Off-Control may operate under the following loads:

- conventional incandescent light sources,
- halogen light sources,
- electrical appliances which power consumption does not exceed the limit for a specified device.

When connecting On/Off-Control act in accordance with the following rules:

- Do not connect loads greater than those recommended!
- Do not connect types of loads other than resistive and incandescent!

| Table A1 - Supported load types (IEC standards) |  |  |
| :--- | :---: | :---: |
|  | Resistive load | Tungsten load |
| per channel | 6.5 A | 6.5 A |
| overall | 10 A | 10 A |

Note. IEC certification applies in EU countries and most countries using 220-240V~.

## INSTALLATION

## A Danger of electrocution!

- On/Off-Control is designed to operate in electrical home installation. Faulty connection or use may result in fire or electric shock.
- All works on the device may be performed only by a qualified and licensed electrician. Observe national regulations.
- Even when the device is turned off, voltage may be present at its terminals. Any maintenance introducing changes into the configuration of connections or the load must be always performed with disabled fuse
- Connecting the On/Off-Control in a manner inconsistent with manual may cause risk to health, life or material damage.


## When connecting On/Off-Control act in accordance with the following rules:

- Connect only in accordance with one of the diagrams,
- On/Off-Control should be installed in a wall switch box compliant with a relevant national safety standards and with depth no less than 60mm,
- Electrical switches used in installation should be compliant with the relevant safety standards,
- Length of wires used to connect the control switch should not exceed 10 m .


## 4.1-Notes for the diagrams

S1 - terminal for 1st switch (has the function of activating the learning mode)
S2 - terminal for 2nd switch
L - terminal for live lead
Q1 - output terminal of the 1st channel
Q2 - output terminal of the 2nd channe
N - terminal for neutral lead
B - service button (used to add/remove the device and navigate the menu)

## 4.2 - Installation of the On/Off-Control



1. Switch off the mains voltage (disable the fuse).
2. Open the wall switch box.
3. Connect with one of the following diagrams:


Single wall switch


Double wall switch
4. After verifying correctness of the connection switch on the mains voltage.
5. Add the device to the Z-Wave network.
6. Turn off the mains voltage, then arrange the device and its antenna in a wall switch box.
7. Close the wall switch box and turn on the mains voltage.

## Notes:

- Switch connected to the S1 terminal is a master switch. It activates the basic functionality of the device (turning the first load on/off) and activates the learning mode (adding/removing).
- The switch connected to the S2 terminal turns on/of the second load in On/Off-Control.
- After switching on the mains voltage LED indicator will signal Z-Wave network inclusion state with a colour:

GREEN - device added
RED - device not added

- In case of problems with adding/removing using S1 switch, use B-button instead (located on the housing).
- While adding On/Off-Control to the network with connected toggle switch, ensure that switch contact is open (off). Otherwise it will prevent adding/removing the device to/from the network.
- The device will try to add itself for 4 minutes after pressing the switch 3 times.
- Adding in security mode must be performed up to 2 meters from the controller.

Adding (Inclusion) - Z-Wave device learning mode, allowing to add the device to existing Z-Wave network.

## To add the device to the Z-Wave network manually:

1. Place On/Off-Control within the direct range of your Z-Wave controller.
2. Identify the S1 switch.
3. Set the main controller in (security/non-security) add mode (see the controller's manual).
4. Quickly, three times press the S1 switch.
5. Wait for the adding process to end.
6. Successful adding will be confirmed by the Z-Wave controller's message.

## REMOVING THE DEVICE

Removing (Exclusion) - Z-Wave device learning mode, allowing to remove the device from existing Z-Wave network.

## To remove the device from the Z-Wave network:

1. Place On/Off-Control within the direct range of your Z-Wave controller.
2. Identify the S1 switch.
3. Set the main controller in remove mode (see the controller's manual).
4. Quickly, three times press the S1 switch.
5. Wait for the removing process to end.
6. Successful removing will be confirmed by the Z-Wave controller's message.

Notes Removing On/Off-Control from the Z-Wave network restores all the default parameters of the device, but does not reset power metering data.

## OPERATING THE DEVICE

## 7.1 - Controlling On/Off-Control using a momentary switch and parameter 20 set to 0 1x click:

- Change the state of the connected load to the opposite one
- (S1 switches 1st channel, S2 switches 2nd channel),
- Change the state of 2nd, 3rd (S1 switch), 4th and 5th (S2 switch) association group to the opposite one.

2x click:

- Set maximum level of devices associated in 2nd, 3rd (S1 switch), 4th and 5th (S2 switch) group.

Hold:

- Start smooth control of devices associated in 3rd (S1 switch) and 5th (S2 switch) group.

Release:

- Stop smooth control of devices associated in 3rd (S1 switch) and 5th (S2 switch) group.


## 7.2 - Controlling On/Off-Control using a toggle switch and parameter 20 set to 1

## Close switch contact:

- Turn ON the connected load (S1 switches 1st channel, S2 switches 2nd channel),
- Turn ON devices associated in 2nd, 3rd (S1 switch), 4th and 5th (S2 switch) group.


## Open switch contact:

- Turn OFF the connected load (S1switches 1st channel, S2switches 2nd channel).
- Turn OFF devices associated in 2nd, 3rd (S1 switch), 4th and 5th (S2 switch) group.


## 7.3-Controlling On/Off-Control using a toggle switch and parameter 20 set to 2

## Change switch position once:

- Change the state of the connected load to the opposite one (S1 switches 1st channel, S2 switches 2nd channel),
- Change the state of 2nd, 3rd (S1 switch), 4th and 5th (S2 switch) association group to the opposite one.


## Change switch position twice:

- Set maximum level of devices associated in 2nd, 3rd (S1 switch), 4th and 5th (S2 switch) group.


## 7.4 - Controlling On/Off-Control using the B-button

On/Off-Control is equipped with a B-button, which allows to use the menu and perform the following actions: 1x click:

- Cancel alarm mode (flashing alarm).
- Select desired menu position (if menu is active).
- Exit range test.
- Turn 1st channel ON/OFF.

3x click:

- Send the Node Info Z-Wave command frame (adding/removing).

Hold:

- Enter the menu (confirmed by the LED indicator).


## 7.5 - Menu allows to perform Z-Wave network actions. In order to use the menu

1. Switch off the mains voltage (disable the fuse).
2. Remove On/Off-Control from the wall switch box.
3. Switch on the mains voltage.
4. Press and hold the B-button to enter the menu.
5. Wait for the LED to indicate the desired menu position with colour:

GREEN - reset energy consumption memory
VIOLET - start range test
YELLOW - reset the device
6. Quickly release and click the B-button again.

## 7.6 - Resetting On/Off-Control

Please use this procedure only when the network primary controller is missing or otherwise inoperable.

1. Switch off the mains voltage (disable the fuse).
2. Remove On/Off-Control from the wall switch box.
3. Switch on the mains voltage.
4. Press and hold the B-button to enter the menu.
5. Wait for the visual LED indicator to glow yellow.
6. Quickly release and click the B-button again.
7. After few seconds the device will be restarted, which is signalled with the red LED indicator colour.

## POWER AND ENERGY CONSUMPTION

- On/Off-Control require the power consumption of connected load equal to 5 W or greater to correctly measure the power and energy.
- Power measurement can contain mains voltage fluctuations within +/- 10\%.
- On/Off-Control stores periodically (every hour) the consumption data in the device memory. Disconnecting the module from the power supply will not erase stored energy consumption data.

On/Off-Control allows for the active power and energy consumption monitoring. Data is sent to the main Z-Wave controller, e.g. Yubii Home.
Measuring is carried out by the most advanced micro-controller technology, assuring maximum accuracy and precision (+/- $1 \%$ for loads greater than 5W).
Electric active power - power that energy receiver is changing into a work or a heat. The unit of active power is Watt [W].
Electric energy - energy consumed by a device through a time period. Consumers of electricity in households are billed by suppliers on the basis of active power used in given unit of time. Most commonly measured in kilowatt-hour [kWh]. One kilowatt-hour is equal to one kilowatt of power consumed over period of one hour,
$1 \mathrm{kWh}=1000 \mathrm{~Wh}$.

## Resetting consumption memory

On/Off-Control allows to erase stored consumption data in three ways:
A. Using functionality of a Z-Wave controller (see the controller's manual).
B. Manually clearing the data using the following procedure:

1. Switch off the mains voltage (disable the fuse).
2. Remove On/Off-Control from the wall switch box.
3. Switch on the mains voltage.
4. Press and hold the B-button to enter the menu.
5. Wait for the visual LED indicator to glow green.
6. Quickly release and click the B-button again.
7. Energy consumption memory will be erased.

## C. By resetting the device.

## ASSOCIATIONS

Association (linking devices) - direct control of other devices within the Z-Wave system network using the wall switch connected to On/ Off-Control.
The association enables On/Off-Control to control directly a device included in Z-Wave network e.g. other Dimmer, Relay Switch, Roller Shutter or scene (may be controlled only through a Z-Wave controller).

- Association ensures direct transfer of control commands between devices, is performed without participation of the main controller and requires associated device to be in the direct range.
- On/Off-Control supports the operation of multichannel devices. Multichannel devices are devices that include two or more circuits inside one physical unit.


## The On/Off-Control provides the association of five groups:

1st association group - "Lifeline" reports the device status and allows for assigning single device only (main controller by default). 2nd association group - "On/Off (S1)" is assigned to switch connected to the S1 terminal (uses Basic command class).
3rd association group - "Dimmer (S1)" is assigned to switch connected to the S1 terminal (uses Switch Multilevel command class).
4th association group - "On/Off (S2)" is assigned to switch connected to the S2 terminal (uses Basic command class).
5th association group - "Dimmer (S2)" is assigned to switch connected to the S2 terminal (uses Switch Multilevel command class).

On/Off-Control in 2nd to 5th group allows to control 5 regular or multichannel devices per an association group, with the exception of "Lifeline" that is reserved solely for the controller and hence only 1 node can be assigned.
It is not recommended to associate more than 10 devices in general, as the response time to control commands depends on the number of associated devices. In extreme cases, system response may be delayed

## Z-WAVE RANGE TEST

A The device has a built in Z-Wave network main controller's range tester.

- To make Z-Wave range test possible, the device must be added to the Z-Wave controller. Testing may stress the network, so it is recommended to perform the test only in special cases.
- Communication mode of On/Off-Control may switch between direct and one using routing, especially if the device is on the limit of the direct range.


## Follow the below instructions to test the main controller's range:

1. Switch off the mains voltage (disable the fuse).
2. Remove On/Off-Control from the wall switch box.
3. Switch on the mains voltage.
4. Press and hold the B-button to enter the menu.
5. Wait for the visual LED indicator to glow violet.
6. Quickly release and click the B-button again.
7. Visual indicator will indicate the Z-Wave network's range (range signalling modes described below).
8. To exit Z-Wave range test, click the B-button.

## Z-Wave range tester signalling modes:

Visual indicator pulsing green - On/Off-Control attempts to establish a direct communication with the main controller. If a direct communication attempt fails, the device will try to establish a routed communication, through other modules, which will be signalled by visual indicator pulsing yellow.
Visual indicator glowing green - On/Off-Control communicates with the main controller directly.
Visual indicator pulsing yellow - On/Off-Control tries to establish a routed communication with the main controller through other modules (repeaters).
Visual indicator glowing yellow - On/Off-Control communicates with the main controller through the other modules. After 2 seconds the device will retry to establish a direct communication with the main controller, which will be signalled with visual indicator pulsing green.
Visual indicator pulsing violet - On/Off-Control does communicate at the maximum distance of the Z-Wave network. If connection proves successful it will be confirmed with a yellow glow. It's not recommended to use the device at the range limit.
Visual indicator glowing red - On/Off-Control is not able to connect to the main controller directly or through another Z-Wave network device (repeater).

## ADDITIONAL FUNCTIONALITY

## Overheat and overcurrent protection

On/Off-Control after detecting overheat or overcurrent will:

- switch off its relay/relays,
- send information about switching off the relay/relays to the controller,
- send Notification Report to the controller (Heat Alarm for overheat, Power Management for overcurrent).


## Activating scenes

On/Off-Control can activate scenes in the Z-Wave controller by sending scene ID and attribute of a specific action using Central Scene Command Class.
By default scenes are not activated, set parameters 28 and 29 to enable scene activation for selected actions.

|  | Switch clicked once | 1 | Key Pressed 1 time |
| :---: | :---: | :---: | :---: |
|  | Switch clicked twice | 1 | Key Pressed 2 times |
|  | Switch clicked thrice | 1 | Key Pressed 3 times |
|  | Switch held | 1 | Key Held Down |
|  | Switch released | 1 | Key Released |
|  | Switch clicked once | 2 | Key Pressed 1 time |
|  | Switch clicked twice | 2 | Key Pressed 2 times |
|  | Switch clicked thrice | 2 | Key Pressed 3 times |
|  | Switch held | 2 | Key Held Down |
|  | Switch released | 2 | Key Released |

## ADVANCED PARAMETERS

On/Off-Control allows to customize its operation to user's needs. The settings are available in the interface of the Z-Wave controller.

| Parameter: | 9. Restore state after power failure |  |  |
| :---: | :---: | :---: | :---: |
| Description: | This parameter determines if the device will return to state prior to the power failure after power is restored. |  |  |
| Available settings: | 0 - the device does not save the state prior to the power failure and returns to „off" position <br> 1 - the device restores its state prior to the power failure |  |  |
| Default setting: | 1 | Parameter size: | 1 [byte] |
| Parameter: | 10. First channel - operating mode |  |  |
| Description: | This parameter allows to choose operating for the 1st channel controlled by the S1 switch. |  |  |
| Available settings: | 0 - standard operation <br> 1 - delay ON <br> 2 - delay OFF <br> 3 - auto ON <br> 4 - auto OFF <br> 5 - flashing mode |  |  |
| Default setting: | 0 | Parameter size: | 1 [byte] |
| Parameter: | 11. First channel - reaction to switch for delay/auto ON/OFF modes |  |  |
| Description: | This parameter determines how the device in timed mode reacts to pushing the switch connected to the S1 terminal. |  |  |
| Available settings: | 0 - cancel mode and set target state <br> 1 - no reaction to switch - mode runs until it ends <br> 2 - reset timer - start counting from the beginning |  |  |
| Default setting: | 0 | Parameter size: | 1 [byte] |
| Parameter: | 12. First channel - time parameter for delay/auto ON/OFF modes |  |  |
| Description: | This parameter allows to set time parameter used in timed modes. |  |  |


| Available settings: | 0 (0.1s), 1-32000 (1-32000s, 1s step) - time parameter |  |  |
| :---: | :---: | :---: | :---: |
| Default setting: | 50 (50s) | Parameter size: | 2 [bytes] |
| Parameter: | 13. First channel - pulse time for flashing mode |  |  |
| Description: | This parameter allows to set time of switching to opposite state in flashing mode. |  |  |
| Available settings: | 1-32000 (0.1-3200.0s, 0.1 s step) - time parameter |  |  |
| Default setting: | 5 (0.5s) | Parameter size: | 2 [bytes] |
| Parameter: | 15. Second channel - operating mode |  |  |
| Description: | This parameter allows to choose operating for the 1st channel controlled by the S2 switch. |  |  |
| Available settings: | 0 - standard operation <br> 1 - delay ON <br> 2 - delay OFF <br> 3 - auto ON <br> 4 - auto OFF <br> 5 - flashing mode |  |  |
| Default setting: | 0 | Parameter size: | 1 [byte] |
| Parameter: | 16. Second channel - reaction to switch for delay/auto ON/OFF modes |  |  |
| Description: | This parameter determines how the device in timed mode reacts to pushing the switch connected to the S2 terminal. |  |  |
| Available settings: | 0 - cancel mode and set target state <br> 1 - no reaction to switch - mode runs until it ends <br> 2 - reset timer - start counting from the beginning |  |  |
| Default setting: | 0 | Parameter size: | 1 [byte] |
| Parameter: | 17. Second channel - time parameter for delay/auto ON/OFF modes |  |  |
| Description: | This parameter allows to set time parameter used in timed modes. |  |  |
| Available settings: | 0 (0.1s), 1-32000 (1-32000s, 1s step) - time parameter |  |  |
| Default setting: | 50 (50s) | Parameter size: | 2 [bytes] |
| Parameter: | 18. Second channel - pulse time for flashing mode |  |  |
| Description: | This parameter allows to set time of switching to opposite state in flashing mode |  |  |
| Available settings: | 1-32000 (0.1-3200.0s, 0.1s step) - time parameter |  |  |
| Default setting: | 5 (0.5s) | Parameter size: | 2 [bytes] |
| Parameter: | 20. Switch type |  |  |
| Description: | This parameter defines as what type the device should treat the switch connected to the S1 and S2 terminals. |  |  |
| Available settings: | 0 - momentary switch <br> 1 - toggle switch (contact closed - ON, contact opened - OFF) <br> 2 - toggle switch (device changes status when switch changes status) |  |  |
| Default setting: | 2 | Parameter size: | 1 [byte] |
| Parameter: | 21. Flashing mode - reports |  |  |
| Description: | This parameter allows to define if the device sends reports during the flashing mode. |  |  |
| Available settings: | 0 - the device does not send reports <br> 1 - the device sends reports |  |  |
| Default setting: | 0 | Parameter size: | 1 [byte] |
| Parameter: | 27. Associations in Z-Wave network security mode |  |  |
| Description: | This parameter defines how commands are sent in specified association groups: as secure or non-secure. Parameter is active only in Z-Wave network security mode. This parameter does not apply to 1st "Lifeline" group. Parameter 27 values may be combined, e.g. 1+2=3 means that 2 nd and 3rd groups are sent as secure. |  |  |
| Available settings: | 0 - none of the groups sent as secure <br> 1-2nd group sent as secure <br> 2 - 3rd group sent as secure <br> 4-4th group sent as secure <br> 8 - 5 th group sent as secure |  |  |
| Default setting: | 15 (all) | Parameter size: | 1 [byte] |



| Available settings: | 1 - ignore turning on with 1 click of the switch <br> 2 - ignore turning off with 1 click of the switch <br> 4 - ignore holding and releasing the switch* <br> 8 - ignore double click of the switch** |  |  |
| :---: | :---: | :---: | :---: |
| Default setting: | 0 | Parameter size: | 1 [byte] |
| Parameter: | 36. S2 switch - Switch ON value sent to 4th and 5th association groups |  |  |
| Description: | This parameter defines value sent with Switch ON command to devices associated in 4th and 5th association group. |  |  |
| Available settings: | 0-255 - sent value |  |  |
| Default setting: | 255 | Parameter size: | 2 [bytes] |
| Parameter: | 37. S2 switch - Switch OFF value sent to 4th and 5th association groups |  |  |
| Description: | This parameter defines value sent with Switch OFF command to devices associated in 4th and 5th association group. |  |  |
| Available settings: | 0-255-sent value |  |  |
| Default setting: | 0 | Parameter size: | 2 [bytes] |
| Parameter: | 38. S2 switch - Double Click value sent to 4th and 5th association groups |  |  |
| Description: | This parameter defines value sent with Double Click command to devices associated in 4th and 5th association group. |  |  |
| Available settings: | 0-255 - sent value |  |  |
| Default setting: | 99 | Parameter size: | 2 [bytes] |
| Parameter: | 40. Reaction to General Alarm |  |  |
| Description: | This parameter determines how the device will react to General Alarm frame. |  |  |
| Available settings: | 0 - alarm frame is ignored <br> 1 - turn ON after receiving the alarm frame <br> 2 - turn OFF after receiving the alarm frame <br> 3 - flash after receiving the alarm frame |  |  |
| Default setting: | 3 | Parameter size: | 1 [byte] |
| Parameter: | 41. Reaction to Flood Alarm |  |  |
| Description: | This parameter determines how the device will react to Flood Alarm frame. |  |  |
| Available settings: | 0 - alarm frame is ignored <br> 1 - turn ON after receiving the alarm frame <br> 2 - turn OFF after receiving the alarm frame <br> 3 - flash after receiving the alarm frame |  |  |
| Default setting: | 2 | Parameter size: | 1 [byte] |
| Parameter: | 42. Reaction to CO/CO2/Smoke Alarm |  |  |
| Description: | This parameter determines how the device will react to CO, CO2 or Smoke frame. |  |  |
| Available settings: | 0 - alarm frame is ignored <br> 1 - turn ON after receiving the alarm frame <br> 2 - turn OFF after receiving the alarm frame <br> 3 - flash after receiving the alarm frame |  |  |
| Default setting: | 3 | Parameter size: | 1 [byte] |
| Parameter: | 43. Reaction to Heat Alarm |  |  |
| Description: | This parameter determines how the device will react to Heat Alarm frame. |  |  |
| Available settings: | 0 - alarm frame is ignored <br> 1 - turn ON after receiving the alarm frame <br> 2 - turn OFF after receiving the alarm frame <br> 3 - flash after receiving the alarm frame |  |  |
| Default setting: | 1 | Parameter size: | 1 [byte] |
| Parameter: | 44. Flashing alarm duration |  |  |
| Description: | This parameter allows to set duration of flashing alarm mode. |  |  |
| Available settings: | 1-32000 (1-32000s, 1s step) - duration |  |  |
| Default setting: | 600 (10min) | Parameter size: | 2 [bytes] |


| Parameter: | 50. First channel - power reports |  |  |
| :---: | :---: | :---: | :---: |
| Description: | This parameter determines the minimum change in consumed power that will result in sending new power report to the main controller. |  |  |
| Available settings: | 0 - reports are disabled <br> 1-100 (1-100\%) - change in power |  |  |
| Default setting: | 20 (20\%) | Parameter size: | 1 [byte] |
| Parameter: | 51. First channel - minimal time between power reports |  |  |
| Description: | This parameter determines minimum time that has to elapse before sending new power report to the main controller. |  |  |
| Available settings: | 0 - reports are disabled 1-120 (1-120s) - report interval |  |  |
| Default setting: | 10 (10s) | Parameter size: | 1 [byte] |
| Parameter: | 53. First channel - energy reports |  |  |
| Description: | This parameter determines the minimum change in consumed energy that will result in sending new energy report to the main controller. |  |  |
| Available settings: | 0 - reports are disabled <br> 1-32000 (0.01-320 kWh) - change in energy |  |  |
| Default setting: | 100 (1 kWh) | Parameter size: | 2 [bytes] |
| Parameter: | 54. Second channel - power reports |  |  |
| Description: | This parameter determines the minimum change in consumed power that will result in sending new power report to the main controller. |  |  |
| Available settings: | 0 - reports are disabled 1-100 (1-100\%) - change in power |  |  |
| Default setting: | 20 (20\%) | Parameter size: | 1 [byte] |
| Parameter: | 55. Second channel - minimal time between power reports |  |  |
| Description: | This parameter determines minimum time that has to elapse before sending new power report to the main controller. |  |  |
| Available settings: | 0 - periodic reports are disabled 1-120 (1-120s) - report interval |  |  |
| Default setting: | 10 (10s) | Parameter size: | 1 [byte] |
| Parameter: | 57. Second channel - energy reports |  |  |
| Description: | This parameter determines the minimum change in consumed energy that will result in sending new energy report to the main controller. |  |  |
| Available settings: | 0 - reports are disabled <br> 1-32000 (0.01-320 kWh) - change in energy |  |  |
| Default setting: | 100 (1 kWh) | Parameter size: | 2 [bytes] |
| Parameter: | 58. Periodic power reports |  |  |
| Description: | This parameter determines in what time interval the periodic power reports are sent to the main controller. |  |  |
| Available settings: | 0 - periodic reports are disabled 1-32000 (1-32000s) - report interval |  |  |
| Default setting: | 3600 (1h) | Parameter size: | 2 [bytes] |
| Parameter: | 59. Periodic energy reports |  |  |
| Description: | This parameter determines in what time interval the periodic energy reports are sent to the main controller. |  |  |
| Available settings: | 0 - periodic reports are disabled 1-32000 (1-32000s) - report interval |  |  |
| Default setting: | 3600 (1h) | Parameter size: | 2 [bytes] |
| Parameter: | 60. Measuring energy consumed by the device itself |  |  |
| Description: | This parameter determines whether energy metering should include the amount of energy consumed by the device itself. Results are being added to energy reports for first endpoint. |  |  |
| Available settings: | 0 - function inactive <br> 1 - function active |  |  |
| Default setting: | 0 | Parameter size: | 1 [byte] |

## Note:

Setting parameters 31-33, 36-38 to appropriate value should result in:

- 0 - turning off associated devices
- 1-99-forcing level of associated devices
- 255 - setting associated devices to the last remembered state or turning them on


## TECHNIGAL SPECIFICATIONS

The product On/Off-Control is produced by Nice S.p.A. (TV). Warnings: - All technical specifications stated in this section refer to an ambient temperature of $20^{\circ} \mathrm{C}\left( \pm 5^{\circ} \mathrm{C}\right)$ - Nice S.p.A. reserves the right to apply modifications to the product at any time when deemed necessary, while maintaining the same functionalities and intended use.

| On/Off-Control |  |
| :--- | :---: |
| Type | in-wall/flush box mounted control unit for remote light control |
| Power supply | $100-240 \mathrm{~V} \mathrm{AC}, 50 / 60 \mathrm{~Hz}$ |
| Rated impulse voltage | 2500 V |
| Rated load current | IEC standards: 6.5 A per channel, 10 A overall |
| Operational temperature | $0-35^{\circ} \mathrm{C}$ |
| For installation in boxes | $\varnothing \geq 50 \mathrm{~mm}$, depth $\geq 60 \mathrm{~mm}$ |
| Dimensions $(\mathrm{L} \times \mathrm{W} \times \mathrm{H})$ | $42.5 \times 38.25 \times 20.3 \mathrm{~mm}$ |

- IEC certification applies in EU countries and most countries using 220-240V~.
- Radio frequency of individual device must be same as your Z-Wave controller. Check information on the box or consult your dealer if you are not sure.

Radio transceiver

| Radio protocol | Z-Wave (500 series chip) |
| :--- | :---: |
| Frequency band | 868.4 or 869.8 MHz EU |
|  | 921.4 or 919.8 MHz ANZ |
| Transceiver range | up to 50 m outdoors |
|  | up to 40 m indoors |
| Max. transmit power | (depending on terrain and building structure) |

${ }^{*}$ *) The transceiver range is strongly influenced by other devices operating at the same frequency with continuous transmission, such as alarms and radio headphones which interfere with the control unit transceiver.

14 PRODUCT DISPOSAL
This product is an integral part of the automation and therefore must be disposed together with the latter.
As in installation, also at the end of product lifetime, the disassembly and scrapping operations must be performed by qualified personnel. This product is made of various types of material, some of which can be recycled while others must be scrapped. Seek information on the recycling and disposal systems envisaged by the local regulations in your area for this product category.
Caution! - some parts of the product may contain pollutant or hazardous substances which, if disposed of into the environment, may cause serious damage to the environment or physical health.
As indicated by the symbol alongside, disposal of this product in domestic waste is strictly prohibited. Separate the waste into categories for disposal, according to the methods envisaged by current legislation in your area, or return the product to the retailer when purchasing a new version.
Caution! - local legislation may envisage serious fines in the event of abusive disposal of this product.

## 15 DECLARATION OF CONFORMITY

Hereby, Nice S.p.A., declares that the radio equipment type On/Off-Control is in compliance with Directive 2014/53/EU.
The full text of the EU declaration of conformity is available at the following internet address: http://www.niceforyou.com/en/support

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