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## Version

| Version | Release Date | Remark |
| :--- | :--- | :--- |
| V1.0 | $24^{\text {th }}$ Mar 2017 | 1st Release |
| V1.1 | $24^{\text {th }}$ April 2017 | Add LED output function |
| V1.2 | 11st July 2017 | Add combination input <br> function |

## Notice

The user manual refer to the following device:

SATION-SW0003.0851


1. Please read this user manual carefully before using the product.
2. This product is used in indoor environment and installed in electrical control box.
3. Please install this product in a dry and ventilated place.
4. Before power on, please confirm the input voltage according to the manual; after power on, please confirm the normal output Voltage before connecting to the control bus.
5. Please make sure the secure shell is in good condition, if the shell is damaged, please stop using to avoid accident.
6. This product is NOT a toy, please make sure it is out of children touch.
7. Only be suitable for EIB/KNX system bus.
8. Others:

The below sign indicates this product can't be dealt as ordinary family rubbish, in order to avoid the possible environment and human health harm caused by the electrical waste, this product must follow recovery processing. Please contact the local recycling department after this product is scrapped, to make sure it can go as the right waste processing procedure.


## 1. Technical Parameters

| KNX bus power | DC 21V~31V |
| :--- | :--- |
| Supply current | $<5 \mathrm{~mA}$ |
| Power Consumption | $<150 \mathrm{~mW}$ |
| Programming key | Key to assign physical address, <br> programming |
| Programming <br> indicator | Orange LED |
| Number of universal <br> interface channels | 4 fold |
| Switching channel <br> number | 3 fold |
| Rated working voltage | $230 \mathrm{VAC}(50 / 60 \mathrm{~Hz})$ |
| Rated working current | 8 A max |
| Life Time | $>1^{*} 10^{7 \text { times }}$ |
| KNX terminal | Use a cable that conforms to the KNX <br> standard |
| Load terminal | Torque 0.4 Nm wire $12-22 \mathrm{AWG}$ |
| Input terminal | Wire 20 to 26 awg |
| Dimensions (W x H x <br> D) | $50^{*} 52^{*} 21 \mathrm{~mm}$ |
| Installation | $86 / 80 \mathrm{Flush}$ mounted in socket |
| Working temperature | $-5^{\circ} \mathrm{C} \sim+45^{\circ} \mathrm{C}$ |
| Long-term storage <br> temperature | $-25^{\circ} \mathrm{C} \sim+55^{\circ} \mathrm{C}$ |
| Transit temperature | $-30^{\circ} \mathrm{C} \sim+70^{\circ} \mathrm{C}$ |

## 2. Product Dimensions




1, M3 screw fixed mounting hole * 2, suitable for non-dark box type fixation
2, Output load terminal
3, Input load terminal
4, Programming indicator (orange)
5, KNX bus terminal
6, Programming key
7, Address label box

## 3. Circuit Wiring

3.1 Output Wiring

3.2 IO wiring
3.2.1 Low level effective and dry node input
When low level of effective input is required, the ETS configuration file is required Inputs Type(only used to input pins) parameter EnablePullup,As shown in the figure below:


The input wiring in this case is as follows:


Note: low level includes the positive signal of the OC gate input and input level below 1VDC

### 3.2.2 High level effective input

When low High of effective input is required, the ETS configuration file is required Inputs Type(only used to input pins) parameter EnablePullup,As shown in the figure below:


The input wiring in this case is as follows:


Note: High level is input 3.3V~24VDC
3.2.3 Input function setting


The input function of this product can be set to the following two ways:
1)Inputs acting on switching outp. the input 1,2 , and 3 control outputs A, B, C. 4 no action.
2)Inputs acting separately on bus, Input 1, 2, 3, 4 independently to provide data for the bus.

## 4.Function Overview

4.1 Overview Devices Switch actuator 3 fold flush mounted in socket, It can be placed directly in 86 boxes or 80 boxes, including 3 fold switch and 4 universal interface units. By connecting the terminals of the KNX bus to the system network, no additional power supply can be required to control the communication load, and the maximum load current of each output is 8 A . Input can be compatible with high and low level, low level and effective, dry node input, OC gate circuit and other forms.

### 4.2 Main function

The allocation of physical addresses and the setting of parameters are completed using the engineering design tool software ETS (version ETS4).

1) Time control function: ON/OFF with adjustable latency time
2)Warning function and time adjustable function for stairway illumination
3)Scene and Pre-set control: 8 or 1
4)Logic operation: and/or/xor/gate function
5)State value checking and response
6)Relay switch location selection after disconnect and recovery of bus voltage
4.3 Universal interface functions:

Combination function:
Dimming function: edge switch, length input dimming;
Shutter control: long input (movement/stop), short input
(stop/move);
Switching function: edge control;

Independent functions:

1) Switching function: edge control, length input control, edge inversion,Status sent, fixed value sent
2) Scene function: select the specific function of the configuration;
3) One key dimming: short input switch, long input dimming;
4) Shutter control: long input (movement/stop), short input (stop/move), automatic reverse;
5) counting function: count the number of edges (rising along or falling edges);
6) Output control LED function: can be bright or flashing;

The above functionality supports object blocking, object and/or logical operations, and electrical behavior configuration on the device.

