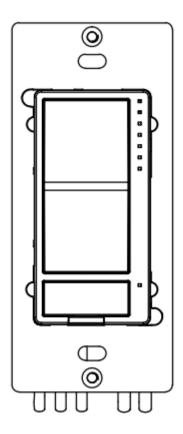
# **ZEN30 DOUBLE SWITCH 800LR VER. 4.10**



### **Locally Button Press function:**

- 1: press 1x: turn output ON (to last set brightness level) or OFF
- 2: hold: dimmer up or dimmer down
- 3: quickly press 3x **UPPER** PADDLE FOR DIMMER: inclusion; quickly press 3x **LOWER** PADDLE FOR DIMMER: exclusion (relay button does NOT work for inclusion/exclusion)

The device should exit inclusion/exclusion after 30 seconds and LED's should stop flashing.

- 4: quickly press 6x UPPER PADDLE FOR DIMMER: change LED Indicator Parameter 1
- 5. quickly press 6x relay button: change LED Indicator Parameter 2
- 6. Whatever state the DIMMER is in, quickly press UPPER paddle 2 times, switch turns on to 100% brightness (or according to setting in Parameter 17 and 18)
- 7: Press and hold for 15 seconds LOWER PADDLE OF DIMMER until all LED's start blinking quickly, then release and within 5 seconds, press and hold the UPPER PADDLE OF DIMMER for 15 SECONDS until all LED's blink again for 3 seconds to reset local device
- 8. press and release lower button: relay ON or OFF (next cycle)
- 9. Tap 4x and hold more than 10 seconds **LOWER** PADDLE OF DIMMER to rotate values in parameter 19 for disabling local control > make sure that the mosfet doesn't change status or scenes are not triggered during this process.

10. Tap 4x and hold more than 10 seconds RELAY button to rotate values in parameter 20 > make sure that the relay doesn't change state or scenes are not triggered during this process.

Button behavior according to scene control attributes:

**UPPER PADDLE (DIMMER): SCENE 1** 

0x00 pressed 1 time (overlap with on control)

0x02 held down (overlap with dimming control, this is OK, will only be used by users who use the dimmer as remote control for other dimmer or bulb)

0x03 pressed 2 times

0x04 pressed 3 times

0x05 pressed 4 times

0x06 pressed 5 times

**LOWER PADDLE (DIMMER): SCENE 2** 

0x00 pressed 1 time (overlap with on control)

0x02 held down (overlap with dimming control, this is OK, will only be used by users who use the dimmer as remote control for other dimmer or bulb)

0x03 pressed 2 times

0x04 pressed 3 times

0x05 pressed 4 times

0x06 pressed 5 times

**BUTTON (RELAY): SCENE 3** 

0x00 pressed 1 time

0x02 held down

0x03 pressed 2 times (please make sure that when enabling scenes with quick double tap, the relay doesn't change state)

0x04 pressed 3 times

0x05 pressed 4 times

0x06 pressed 5 times

# **Command class**

COMMAND\_CLASS\_ZWAVEPLUS\_INFO, COMMAND\_CLASS\_SWITCH\_MULTILEVEL, COMMAND\_CLASS\_SWITCH\_BINARY, COMMAND\_CLASS\_ASSOCIATION, COMMAND CLASS MULTI CHANNEL ASSOCIATION, COMMAND\_CLASS\_ASSOCIATION\_GRP\_INFO, COMMAND\_CLASS\_TRANSPORT\_SERVICE, COMMAND CLASS VERSION, COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC, COMMAND CLASS DEVICE RESET LOCALLY, COMMAND CLASS POWERLEVEL, COMMAND\_CLASS\_CONFIGURATION, COMMAND\_CLASS\_CENTRAL\_SCENE, COMMAND\_CLASS\_MULTI\_CHANNEL, COMMAND\_CLASS\_SECURITY\_2, COMMAND\_CLASS\_SUPERVISION,

COMMAND\_CLASS\_FIRMWARE\_UPDATE\_MD

# **Association**

Group 1 for lifeline communication of on / off status to Z-Wave controller.

Group 2 for ENDPOINT 1 status and overload communication to other Z-

Wave devices in the network. Supported command classes:

BASIC SET

Group 3 for ENDPOINT 2 status and overload communication to other Z-

Wave devices in the network. Supported command classes:

BASIC SET

# **Parameter Settings**

#### Parameter=1 LED Indicator Mode for Dimmer

Size=1 byte

Value=0 On when Off and Off when On

1st LED (counting from top) is ON when dimmer is OFF.

When dimmer is ON, ALL LED's are OFF BUT when user start changing brightness, all LED's show new brightness level during dimming (1st LED also participates in that) and once brightness level is set, the LED's stay on for 2 seconds to show selected brightness level and turn off.

Value=1 On when On and Off when Off

All LED's are OFF when dimmer is OFF.

When dimmer is ON, ALL LED's show new brightness level during dimming (1st LED also participates in that) and once brightness level is set, the LED's stay on o show selected brightness level until the switch is turned off.

Value=2 Always Off

All LED's are OFF when dimmer is ON or OFF. All LED's are OFF when user is changing brightness.

Value=3 Always On

1st LED (counting from top) is ON when dimmer is OFF.

When dimmer is ON, ALL LED's show new brightness level during dimming (1st LED also participates in that) and once brightness level is set, the LED's stay on o show selected brightness level until the switch is turned off (right now just 1 LED stays turned on after the brightness is set instead of the brightness level LEDs).

Default =0

### Parameter=2 LED Indicator Mode for Relay

Size=1 byte

Value=0 On when Off and Off when On

Value=1 On when On and Off when Off

Value=2 Always Off

Value=3 Always On

Default =0

#### Parameter=3 LED Indicator Color for Dimmer

Size=1 byte

Value=0 White

Value=1 Blue

Value=2 Green

Value=3 Red

Default =0

### Parameter=4 LED Indicator Color for Relay

Size=1 byte

Value=0 White

Value=1 Blue

Value=2 Green

Value=3 Red

Default =0

#### Parameter=5 LED Indicator Brightness for Dimmer

Size=1 byte

Value=0 Bright (100%)

Value=1 Medium (60%)

Value=2 Low (30%)

### Parameter=6 LED Indicator Brightness for Relay

Size=1 byte

Value=0 Bright (100%)

Value=1 Medium (60%)

Value=2 Low (30%)

Default =1

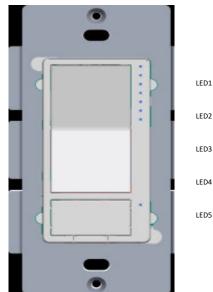
#### Parameter=7 LED Indicator Mode for Scene

Size=1 byte

Value=0 Enable

Value=1 Disable

Default = 1



3xtap

1st attribute for scene 1 or scene 2 or scene 3 (single tap) = LED1 (counting from TOP) lit 3 seconds, and then turns off to confirm the Scene is triggered.

2nd attribute for scene 1 or scene 2 or scene 3 (2 tap) = LED1+ LED2 lit 3 seconds, and then turns off to confirm the Scene is triggered.

3rd attribute for scene 1 or scene 2 or scene 3 (3 tap) = LED1+ LED2+LED3 lit 3 seconds, and then turns off to confirm the Scene is triggered.

Upper 3xtap now shows scene#3 (3 LEDS lit for 3s – no blinking all LEDs) Lower paddle does not indicate the scene but ALL LEDs blinks for 30s as it is in exlusion mode. HOWEVER with par 7=1 (disable LED foe scenes) no ANY LED activity while

!!! After next par7 cycle lower paddle works as it should – all LEDs blink

Now 3 tap lower or upper starts flashing all LEDS for 30s, no scene indicator then.

4th attribute for scene 1 or scene 2 or scene 3 (4 tap) = = LED1+

LED2+LED3+LED4 lit 3 seconds, and then turns off to confirm the Scene is triggered.

5th attribute for scene 1 or scene 2 or scene 3 (5 tap) = = LED1+ LED2+LED3+LED4+LED5 lit 3 seconds , and then turns off to confirm the Scene is triggered.

6th attribute for scene 1 or scene 2 or scene 3 (held down) = = LED1+ LED2+LED3+LED4+LED5+LED6 lit 3 seconds , and then turns off to confirm the Scene is triggered.

#### Parameter=8 Auto Turn-Off Timer for Dimmer

Size=4 byte

Values: 0 – 65535 (minutes)

0 – timer disabled0 – default setting

#### **FCC Caution**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.