# DESCRIPTION

Once plugged to 10000322-039 or 10000320-039, this key allows the direct control of a load via local pulsation or Z-Wave.

# **KEYPAD USE & FEEDBACKS FOR SWITCH (10000322-039)**

EVENT	KEYPAD ACTION	LOAD STATE	FEEDBACK LEDS	LOAD ACTION
	No pushed		- OFF (Reference setting	
			point 1 and 12)	
			- Key not associated with a	
			Z-Wave network: intermit-	
			tent of 2sec.	
			- Error: intermittent of 0.1sec.	
Slider Area	Touch detected		Central LED lights UP	
touch			for 5 sec	
Press key	Short press	OFF	Central LED ON for 5	Turns ON
	(t<2sec)		seconds	
		ON	Central LED Turns OFF	Turns OFF
Add/Remove	Long press		Central LED blinks until	The device sends an Info node
to/from Z-Wa-	2s <t<30s< td=""><td></td><td>release of Pushbutton</td><td>to include the exclusion of the</td></t<30s<>		release of Pushbutton	to include the exclusion of the
ve Network				Z-Wave network or asociaton
				to an auxiliar device.
Reset default	Long press t>30s		Main LED light up for 2.5 sec.	Reset to default state.

<sup>\*</sup> Some of the functions can be changed depending on the configuration parameters.

# **KEYPAD USE & FEEDBACKS FOR DIMMER (10000320-039)**

EVENTE	KEY ACTION	LIGHT ESTATE	FEEDBACK LEDS	LIGHT ACTION
	Not pressed		- OFF (Reference setting point 1 and 12) - Key not associated with a Z-Wave network: intermit- tent of 2 sec. - Error; intermittent of 0.1 sec.	
Touch Slider Area	Touching detected		The LEDs show the last dimming value	
		ON	The LEDs show the dim- ming value	
Slide finger across touch area	Slider detected	OFF	The LEDs turns ON/OFF showing the dimming va- lue that will be set after press the key.	
		ON		Load is dimmed while fin- ger slides over the touch area
Press key	Short press t<2s	OFF	The LEDs shows the dim- ming value; if slider area is not touched, LEDs will remain ON for 5 sec	Light is turned ON to the value shown on the LEDs
		ON	The LEDs shows the dim- ming value; if slider area is not touched, LEDs will remain ON for 0,5 sec	Š
Add/Remove to/from Z-Wa- ve Network	Long press 2s <t<10s< td=""><td></td><td>release of Pushbutton</td><td>The device sends a Node Info to be included/exclu- ded or associated with a Z-Wave network device.</td></t<10s<>		release of Pushbutton	The device sends a Node Info to be included/exclu- ded or associated with a Z-Wave network device.
Calibrate 1	Long press 10s <t<30s< td=""><td></td><td>Central LED blink during cali- bration</td><td>The dimmer performs a slow ON ramp and some ON/OFF cicles to adjust calibration parameters. After calibration the light will recover the state before calibration.</td></t<30s<>		Central LED blink during cali- bration	The dimmer performs a slow ON ramp and some ON/OFF cicles to adjust calibration parameters. After calibration the light will recover the state before calibration.
Reset default	Long press t>30s		The central LED performs 1 blink of 2.5 sec.	The dimmer parameters are set to default. It is reported that calibration is necesary. 1

<sup>&</sup>lt;sup>1</sup>1 By default, the first time the electronic controller is powered, it needs to be calibrated. That situation is indicated with a fast blinking in the central LED. Calibration will be performed after the first press in the rocker or in the electronic controller 10000320-039. During the calibration, central LED will flash and the load will be regulated gradually. This process can take 1 minute.

# **Z-WAVE COMPLIANCE**

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

# **Z-WAVE SPECIFICATIONS**

Z-WAVE DEVICE SPECIFICATION			
Device Type	ON/OFF POWER SWITCH		
Generic Device Type	GENERIC_TYPE_SWITCH_		
	BINARY		
Specific Device Type	SPECIFIC_TYPE_POWER_		
	SWITCH_BINARY		
Role Type	ROLE_TYPE_SLAVE_		
	ALWAYS_ON		

SUPPORTED COMMAND CLASSES
COMMAND_CLASS_ZWAVEPLUS_INFO_V2
COMMAND_CLASS_VERSION_V2
COMMAND_CLASS_MANUFACTURER_SPECIFIC_V2
COMMAND_CLASS_BASIC_V1
COMMAND_CLASS_ASSOCIATION_V2
COMMAND_CLASS_ASSOCIATION_GRP_INFO_V3
COMMAND_CLASS_POWERLEVEL_V1
COMMAND_CLASS_CONFIGURATION_V2
COMMAND_CLASS_DEVICE_RESET_LOCALLY_V
COMMAND_CLASS_FIRMWARE_UPDATE_MD_V4
COMMAND_CLASS_SWITCH_BINARY_V1
COMMAND CLASS METER V4

# **ASSOCIATION GROUPS**

Groups	Group 1 (Lifeline) -> Name "LIFE"	
Max. devices in Group	3	
Automatic reports	On/Off Report when load state is changed:	
·	- On -> CC Basic, Basic Report, Value 0xFF	
	- Off -> CC Basic, Basic Report, Value 0x00	
	Instant Power Consumption vary over 10% and is stable almost 2sec	
	- CC Meter, Meter Report, "Electric meter", "Consumed", "Watts", Size 4, Precision 1, Value (W)	
	Calibration requirement change. (If device needs to be calibrated and is Added into a ZWave	
	network, it will report after receive an Association Set of life line).	
	- Calibration required -> CC Configuration, Configuration Report, Param 23, Value 0xF	
	- Calibration not required -> CC Configuration, Configuration Report, Param 23, Value 0x00	
	After reset the Z-Wave module, a DEVICE-RESET-LOCALLY-NOTIFICATION is sent.	
Groups	Group 2 (Control) -> Name "CTRL"	
Max, devices in Group	20	
Automatic reports	On/Off Report when load state is changed:	
- IIIII Aporto	- On -> CC Basic, Basic Report, Value 0xFF	
	- Off -> CC Basic, Basic Report, Value 0x00	

# CONFIGURATION

	NAME	SIZE	VALUES
1	Association LED	1	0x00 -> Turns the LED OFF (default)
			0xFF -> Turns the LED ON
10	Delay On	1	0x00 Disables timing (default)
11	Activation TIME		0x01-0x7F   1 second (0x01) to 127 seconds (0x7F)
			in 1 second resolution.
16	Delay Off		0x80-0xFE   1 minute (0x80) to 127 minutes
	·		(0xFE) in 1 minute resolution.
9	Calibration <sup>2</sup>		0x01 -> Device performs calibration using Trailing and leading
			Edge and decides which one is better.
			0x02 -> Device is calibrated using Trailing Edge.
			0x03 -> Device is calibrated using Leading Edge.
12	Behavior of LED in Repose	1	0x00 -> LED OFF (Default)
	·		0xFF -> LED on at 20% of maximum level
13	Lock Input	1	0x00 -> Unlock the direct control of load. (Default)
			0xFF -> Lock the direct control of load.
15	Reset Default	2	0x9867 -> Parameters, Groups, and Z-Wave status are
	(Write Only)		restored to default.
			0x4312 -> Parameters, except Lock long press are resto-
			red to default.
19	Press Action	1	0 -> (Default) When press t<2sec device toggles the load.
			1 -> When press t<2sec device turns ON the load.
			2 -> When press t<2sec device turns OFF the load.
			4 -> When press t<2sec device turns ON the load. When
			press 2sec <t<10sec device="" load.="" off="" slider<="" td="" the="" turns=""></t<10sec>
			does not works. With this configuration, the device will not
			send the Node Info neither Show the LEDs feedback with
			this press action.
20	Identify	1	0xFF -> the central LED blinks for 5 seconds in order to
	(Write only)		identify the device.
21	State of charge	2	B0 -> 0x00 Load is OFF
	(Read Only)		0x01 Load is ON.
			B1 -> 0x00 Load is OFF
			0xFF Load is ON
23	Calibration Required	1	0x00 -> Calibration is not required.
	(Read Only)		0xFF -> It is necessary to calibrate the dimmer to work properly.
27	Lock long press	1	0x00->Long press works as described previously.(Default)
			0xFF ->Long press of 2s <t<10s don't="" info<="" node="" sends="" td="" the=""></t<10s>
			Long press of t>30s Parameters, except Lock long
			press are restored to default and device send a Node Info.

TIFICATION will be sent to inform controller that node has been removed from network, but the device will keep the current configurations.

To restore the configurations values, please perform one of these actions:

- Use Command CONFIGURATION SET with default bit to 1 for each

- configuration parameter.
- Perform Reset Default Action via keypad pressing or configuration command Default.

<sup>\*</sup> Some of the functions can be changed depending on the configuration parameters.

<sup>&</sup>lt;sup>2</sup> Calibration process takes around 15seconds please avoid to interact with Dimmer while this operation is performed to grant the correct calibration of dimming control.