# ring

# Keypad Z-Wave Technical Manual



# Ring Keypad

# Adding Keypad to a Z-Wave Network

Ring Keypad can be added via smart start or via classic inclusion mode -

#### **Smart Start Inclusion Steps:**

- 1. Initiate add keypad flow in the Ring Alarm mobile application Follow the guided add flow instructions provided in the application
- 2. Scan the QR code found on the package of the keypad or the QR code found on the back of the keypad
- 3. Plug in the keypad to line power
- 4. When the inclusion process in complete, the LED on the keypad will be solid blue, then go out.
- 5. Test the Keypad. Any button presses would beep

#### **Classic Inclusion Steps:**

- 1. Initiate add keypad flow in the Ring Alarm mobile application Follow the guided add flow instructions provided in the application
- 2. Select add manually and enter the 5 digit DSK pin found on the package of the keypad or the QR code found on the back of the keypad
- 3. Plug in the keypad to line power
- 4. Press and hold "1" key for three seconds
- 5. When the inclusion process in complete, the LED on the keypad will be solid blue, then go out.
- 6. Test the Keypad. Any button presses would beep

This is a SmartStart enabled product which can be added into a Z-Wave network by scanning the Z-Wave QR Code present on the product with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity.

This product can also be operated in any Z-Wave network with other Z-Wave certified devices from other manufacturers.

This product is not a main operated device.

Wake up is not supported in this device

# Removing a Keypad to a Z-Wave Network

#### **Exclusion Instructions**

1. Initiate remove keypad flow in the Ring Alarm mobile application – Select the settings icon from device details page and choose

"Remove Device"

- 2. Press and hold "1" key for three seconds
- 3. When the exclusion process in complete, the LED on the keypad will be solid blue, then go out.
- 4. Test the Keypad. Any button presses would not beep

## Ring Base Station - Reset

#### **Factory Default Instructions**

- 1. Press and hold "5" key and using a pointed end of a paperclip, gently press and release reset button via the reset pin hole found at the back of the keypad
- 2. Red network LED at the top left-hand corner will start to blink rapidly
- 3. Wait for the red LED to stop blinking then release the "5" key

Use this procedure only in the event that the network primary controller is missing or otherwise inoperable.

# **Ring Keypad EU - Notification Information**

#### **Notification Supported Report:**

Keypad supports Heat Alarm (0x04) and Home Security (0x07) and Power Management (0x08) and System (0x09).

#### **Event Supported Report:**

Heat Alarm (0x04): Clear State (0x00), OVERHEAT\_DETECTED\_UNKNOWN\_LOCATION (0x02)

Home Security (0x07): Motion detection (0x08), State idle (0x00)

Power Management (0x08): State idle (0x00), Power has been applied (0x01), AC mains disconnected (0x02), AC mains re-connected (0x03), Battery is charging (0x0C)

System (0x09): SYSTEM\_SOFTWARE\_FAILURE (0x04) with 0x55

# Ring Keypad EU – Association Information

#### **Association - Lifeline**

This keypad has one Association group and Max 1 node. Group 1 is a lifeline group who will receive unsolicited messages relating to entry control notifications, notifications reports, battery report notifications, and device reset locally notifications

### Ring Key EU – Configuration Information

Ring Keypad offers a wide variety of advanced configuration settings. Below parameters can be accessed from main controllers configuration interface.

Parameter	Size	Default Value/ Dec	Description	
1 (0x01)	2	70	Battery Report Interval: Default Heartbeat check in time. Available settings: 70-1440 mins.	
2 (0x02)	1	1	Z-Wave Sleep Timeout: Time to wait after receiving ZW for more OTA messages. Available settings: 1-5 seconds	
3 (0x03)	1	1	Co-Proc Is Alive: Base Station check to see if the co-proc is operational. 0 = No 1 = Yes	
4 (0x04)	1	5	Proximity Timeout: Timeout when proximity is detected and no input is received. Available settings: 0-30 seconds	
5 (0x05)	1	5	Button Press Timeout: Timeout when a button is pressed, but a sequence is not completed and buttons are no longer being pressed Available settings: 0-30 seconds	
6 (0x06)	1	15	Status Change Timeout: Available settings: 10-60 seconds	
7 (0x07)	1	0	Power Mode: Set the battery power saving mode for the keypad.  0=Extended Battery Life 1=Normal Battery Life	
8 (0x08)	1	3	Key Backlight Timeout: Timeout for keypad LED backlight to stay on between key presses. Available settings: 1-15 seconds	
9 (0x09)	1	100	Key Backlight Brightness: Adjusts the brightness of the keypad backlight Available settings: 0-100%	
10 (0x0A)	1	8	Key Tone Volume: Volume, Tone Time, Frequency Available settings: 0-10	
11 (OxOB)	1	5	Ambient Light Sensor Level: Light threshold where keypad will stop backlighting if higher than Available settings: 0-100	
12 (0x0C)	1	6	Siren Volume: Volume to produce loudest output, Needs to be calibrated Available settings: 0-10	
13 (0x0D)	1	1	Proximity On/OFF: Turn On and Off the Proximity Detection.  0 = off 1 = on	
14 (0x0E)	1	100	Proximity Distance: Adjusts the proximity distance (CM) If applicable to the product. Available settings: 0-100CM	
15 (0x0F)	1	50	Extended Battery Life LED Brightness Adjustment: Percentage of brightness for all LEDs in "Power Mode" = Extended (needs calibration) Available settings: 0-100%	

Parameter	Size	Default Value/ Dec	Description		
16 (0x10)	1	65	Reduced Battery Life LED Brightness Adjustment: Percentage of brightness for all LEDs in "Power Mode" = Reduced (needs calibration) Available settings: 0-100%		
17 (0x11)	1	5	Fast Blink Rate: LSB = 0.1 sec Fast Rate Type to blink the LEDs Available settings: 1-100		
18 (0x12)	1	2	Slow Blink Rate: LSB = 0.5 sec Slow Rate Type to blink the LEDs Available settings: 1-100		
19 (0x13)	2	1500	Supervision Report Timeout. settings: 500-5000 millisecond		
20 (0x14)	1	1	Number of Re-transmissions Attempts. settings: 0-5		
21 (0x15)	1	5	Wait Period Between Re-transmissions Attempts. settings: 1-60 seconds		
	1	0 (US English)	Available settings: 0~31. Set the languages to the keypad. Get this configuration parameter and you can know the current Language used for this Keypad.		
			Value/Decimal	Languages	
			0	US English	
			1	UK English	
			2	French	
22 (0x16)			3	German	
			4	Italian	
			5	Spanish	
			6	Dutch	
			7	Danish	
			8	Norwegian	
			9	Swedish	
			10	Finnish	
			11	Arabic	
			12-31	Undefined	
23 (0x17)	4	-	Read Only! Configuration Report Value:		
			BYTEO		
			BYTE 1		
			BYTE 2		
			BYTE 3	Bit mask data for supported languages. LSB format. Detail in below.	
24 (0x18)	3	-	Read Only! Configuration Report Value:		
			BYTE 0	Quantity of audio files	
			BYTE 1	Audio file version	
			BYTE 2	Audio file sub version	

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