LEEDARSON 7AA-SS-VE-A0 Bypass Door Window Sensor User Guide

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Bypass Door Window Sensor Z-Wave™ 7007
AA-SS-VE-A0

Bypass Door Window Sensor
Quick Start Guide

Contents

In The Box

Door/Window sensor

APP Set Up

- Remove the plastic sheet from the battery cabinet. It’s power on now.
- Add sensor
- The sensor is in pairing mode
- The sensor is connected to the gateway

Product Introduction

The Leedarson door window sensor is designed for use with scenes in home automation and security systems, the door window sensor lets you know when doors or windows are opened and can trigger different actions in response to that open action (or close action).

Detection Technology	Hall
Detective Range	20mm
Communication Protocol	Z-Wave
Radio Frequency	908.42MHz (US) 868.42MHz (EU)
Wireless Range	More than 200m outdoors Approximately 30m indoors (depending on building materials)
Power Source	3V, CR2 *1
Battery Life	3 years
Mounting	Screws or 3M Tape
Operating Temperature	0°C to 40°C
Operating Humidity	Up to 85% non-condensing
Certifications	CE/FCC, Z-Wave
OTA	Yes
Dimensions (mm):	68.4.(L)*24.4(W)*21.5(H) for Main Body 44.4(L)*15(W)*13(H) for Magnetic Part

Product Installation

This product can be mounted with screws or 3M adhesive tape, install it according to the following step:

1. Remove the plastic sheet for isolating the battery from the battery cabinet.
2. Use a pin to reset the pinhole switch for 5 seconds to reset the sensor. The sensor will be in pairing status.
3. Stick the slim magnet and device onto the door/window, no further than 20 mm from the sensor, fix the device on the door/window by screw or 3M tape.
4. The magnet and the main sensor must be less than 20 mm apart. The main sensor must be affixed to the frame and the magnet must be affixed to the door window.
5. Should not be mounted on a metal frame.

Function of action

Trigger	Description
Power on	1. **On the network:** Send Battery Report, Sensor Multilevel Report. and Wake Up Notification, LED keeps on 1 second.
	Not On the network: LED slow blinks red 3 times and start SmartStart.

SmartStart Inclusion	**Add the Door Sensor into the Z-Wave network via SmartStart:** 1. Add Door Sensor DSK into the primary controller SmartStart Provisioning List (If you don't know how to do this, refer to its manual, DSK usually prints on the main body). 2. Remove the battery from the Door Sensor. A few seconds later, reinsert the battery i n the DUT. 3. The Door Sensor will send a "Z-Wave protocol Command Class" frame to start Smar tStart Inclusion. 4. LED will flash green during the inclusion, and then solid green for 2 seconds to indic ate that the inclusion is successful, otherwise the LED will solid red for 2 seconds in which you need to repeat the process from step 2 **Note:** The user should follow the procedure in the section below if the controller does n ot support SmartStart inclusion.
Short press Z-Button one time	**Add the Door Sensor into the Z-Wave network:** 1. Power on your Door Sensor set your Z-Wave controller into add/inclusion mode. 2. Trigger this action 3. LED will flash green during the inclusion, and then solid green for 2 seconds to indic ate the inclusion is successful, otherwise, the LED will solid red for 2 seconds in whi ch you need to repeat the process from step 2 **Remove Door Sensor from a Z-Wave network:** 1. Power on your Door Sensor, and let the Z-Wave primary controller into remove/exclu sion mode. 2. Trigger this action. 3. LED will flash red during the exclusion, and then solid red for 2 seconds to indicate t hat the exclusion is successful, otherwise the LED will be solid green for 2 seconds i n which you need to repeat the process from step 2.
Short press the Z- butt on three times	**On the network:** Send Wake up a notification, and LED will fast blink green during sen ding data.
	Not on the network: NOP.
Press and hold Z-Butt on for more than 5 se conds	**Reset Door Sensor to factory default.** LED will blink red faster and faster within 5 seconds and then keep solid red until the b utton is released. The device will reset itself to factory default by sending a "Device Res et Locally Notification" to the gateway when the button is released. **Note:** Please use this procedure only when the network primary controller is missing or otherwise inoperable.
Short press the Bypas s-Button	**Only on the network:** The door Sensor will enter Bypass mode for 5 minutes. **Bypass mode:** When the bypass button is pressed, the first "open door event" will not be triggered and the first "close door event" will clear the bypass mode.

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

manufacturers. All mains operated nodes within the network will act as repeaters regardless of vendor to increase the reliability of the network.

This device supports SmartStart inclusion and can be added to a network by scanning the QR Code on the product.

Quick Response Code (QR Code):

The first 16 bytes of the ECDH Public Key and sometimes additional information is encoded into a QR Code graphic. When referred to in this document, “DSK” applies to the Full DSK, the combination of Full DSK and QR Code, or the combination of Pin Code and QR Code. Please refer to the below diagram. the QR code can be found on the bottom of the sensor” or ” The DSK may be located on the back of the packaging.

Safety Information

Battery Safety Information:

- This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death. Keep away from babies and small children at all times.
- If the battery is swallowed or placed inside any part of the body, immediately seek medical help.
- Risk of explosion if the battery is replaced by an incorrect type.
- Dispose of used battery promptly.

IMPORTANT: Do not expose yourself to rain. Install the product at least 3 ft. from the door for optimum performance.

This alarm contains small parts and is not suitable for children. Periodically check the condition of the batteries.

Disposal and Recycling Information:

Correct Disposal of this product. This marking indicates that this product should not be disposed of with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased.

They can take this product for environmentally safe recycling.

Maintenance

1. f need to clean the sensor, please use a soft cloth with a little alcohol to wipe it after you cut off the power.
2. This product is just for indoor use only.
3. Should be affixed indoors and away from sources of moisture.
4. This product has a low voltage detection reminder. When the battery voltage is in low status, the sensor will give out a low battery signal to the gateway.
5. Replace the battery timely on low battery warning to ensure the sensor works properly. Please use battery model CR2 only.

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.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Hereby, Corporation declares that this device is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU
Special Rule Of Each Command Class

Parameter	Value
Z-Wave Plus Version	0x02
Role Type	0x06 (ZWAVEPLUS_INFO_REPORT_ROLE_TYPE_SLAVE_SLEEPING_REPORTING)
Node Type	0x00 (ZWAVEPLUS_INFO_REPORT_NODE_TYPE_ZWAVEPLUS_NODE)
Installer Icon Type	0x0C06 (ICON_TYPE_SPECIFIC_SENSOR_NOTIFICATION_ACCESS_CONTROL)
User Icon Type	0x0C06 (ICON_TYPE_SPECIFIC_SENSOR_NOTIFICATION_ACCESS_CONTROL)

Z-Wave Plus ™ Info Report Command Class
Association Command Class
Door Sensor supports 2 association groups and a max of 5 nodes for each group.

Grouping Identifier	Max Node	Send Commands
Group 1	0x05	2. Notification Report. The sensor will send a Notification Report when the supported event is triggered. 3. Sensor Multilevel Report. 4. Sensor will send Sensor Multilevel Report in the time set by configuration parameter 0x21/Power on will trigger Sensor Multilevel Report. 5. Battery Report. Power on or the battery level is low 6. Central Scene Notification. The bypass button is pressed 7. Device Reset Locally. Z-Button is pressed and held for more than 5 seconds
Group 2	0x05	1. Basic Set Sensor will send Basic Set when the sensor body and magnet are removed or combined.

Association Group Info Command Class
Association Group Info

Grouping identifier	Group Name	Profile MS	Profile LS
1	Lifeline	0x00	0x01
2	On/Off control	0x71	0x06

Association Group Command-List

Group 1	Command List Support
Command Class	COMMAND_CLASS_NOTIFICATION_V8(0x71)
Command	NOTIFICATION_REPORT_V8(0x05)
Command Class	COMMAND_CLASS_BATTERY(0x80)
Command	BATTERY_REPORT(0x03)
Command Class	COMMAND_CLASS_DEVICE_RESET_LOCALLY(0x5A)
Command	DEVICE_RESET_LOCALLY_NOTIFICATION(0x01)
Command Class	COMMAND_CLASS_SENSOR_MULTILEVEL_V5(0x31)
Command	SENSOR_MULTILEVEL_REPORT(0X05)
Command Class	COMMAND_CLASS_CENTRAL_SCENE_V3(0x5B)
Command	CENTRAL_SCENE_SUPPORTED_NOTIFICATION_V3(0x03)
Group 2	**Command List Support**
Command Class	COMMAND_CLASS_BASIC(0x20)
Command	BASIC_SET(0x01)

Notification Commands

Notification Type	Notification Event
HOME_SECURITY (0x07)	(0x00) Previous Events cleared (0X03) TAMPERING_COVERING_REMOVED
ACCESS_CONTROL (0x06)	(0x16) WINDOW_DOOR_IS_OPEN (0x17) WINDOW_DOOR_IS_CLOSE
POWER_MANAGEMENT (0x08)	(0x0A) REPLACE_BATTERY_SOON 10 (0x0B) REPLACE_BATTERY_NOW 11 (0x00) Previous Events cleared
SYSTEM (0x09)	(0x09) Digital input high state

How to trigger these different notifications;
Home Security:
Tampering_Covering_Removed (0x03): the tamper button back to the main body is released.
Previous Events cleared (0x00): the tamper button back the main body is pressed.
Access Control:
The door is open (0x16): the separation of the main body and the magnet.
The door is closed (0x17): the combination of the main body and the magnet.
Power Management:
REPLACE_BATTERY_SOON (0x0A): When the Door Sensor first time detects the battery level is less than/equal to the value set by configuration parameter 0x0A.
REPLACE_BATTERY_NOW (0x0B): When the Door Sensor first time detects battery level is less than/equal 5%.
Previous Events cleared (0x00): When the battery is replaced by a new one.
SYSTEM:
Digital input high state: When a powerful magnet is put on the Door Sensor.

PS: This is used to notify the user that may be a thief who intends to destroy the Intruder alarm system.

5.4 Wake Up Interval Capabilities Report CC

Parameter	Value
WAKEUP_PAR_DEFAULT_SLEEP_TIME	0x5460
WAKEUP_PAR_MAX_SLEEP_TIME	0x015180
WAKEUP_PAR_MIN_SLEEP_TIME	0x14
WAKEUP_PAR_SLEEP_STEP	0x14

5.5 Manufacturer Specific Report

Parameter	**Value**
Manufacturer ID 1	0x03
Manufacturer ID 2	0x00
Product Type ID 1	0x03
Product Type ID 2	0x00
Product ID 1	0x00
Product ID 2	0x41

5.6 Configuration Set Command Class

5.6.1 Command Format

7	6	5	4	3	2	1	0
Command Class = COMMAND_CLASS_CONFIGURATION							
Command = CONFIGURATION SET							
Parameter Number							
Default	**Reserved**				**Size**		
Configuration Value 1(MSB)							
Configuration Value 2							
……							
Configuration Value n(LSB)							

5.7 Central Scene (8 bit)

Command	Key Attribute	number
Central Scene(press central button)	0x00(press 1 time)	0x01
	0x01(release)	0x01
	0x02(held)	0x01
	0x03(press 2 times)	0x01

5.9 Parameter Number Definitions (8 bit)

Parameter Number	Description	Default Value(dec)	Size

3×01	**7210Fterge** Set the range about magnetic field Range: 0-the range of parameter 0x02 is 0x00000001-0x00004B00, the range of parameter 0x03 is x00000001-0x00002300. 1- the range of parameter 0x02 is 0x00000001-0x0002EE00, the range o f parameter 0x03 is x00000001-0x00015E00.	0	I
)x02	**72100P** Set the average magnetic field in ut Range: 0x00000001-0x00004B00 or 0x00000001-0x0002EE00	640	4
3×03	**7210PolHyst** Set the offset about magnetic field Range: 0x00000001-0x00002300 or 0x00000001-0x00015E00	200	4
DxOA	**LoweatRecent** This parameter defines a battery level as the “low battery. Range: Ox05-0x32	10	
0x0E	**BasicEnable** Enable/Disable BASIC SET command 0 – Disable. 1 – Enable.	0	1
0x0F	**BasicReverse** The door Sensor reverses its value of BASIC SET when the magnet is tri ggered. 0 -Send BASIC SET VALUE = OxFF/Ox00 to nodes associated with grou p 2 when the door is opened/closed. 1 -Send BASIC SET VALUE = 0/255 to nodes associated with group 2 wh en the door is opened/closed.	0	1

3×20	**Bypass** Enable/Disable Bypass mode 0 – Enable. 1 – Disable.	0	1
0x21	**temp** The interval time the Door Sensor reports the Multilevel Sensor Report to the association group1 in minutes. 0x0F-0xFF	15	1
0xFE	**LockConfig** Enable/Disable configuration set 0 – Enable. 1 – Disable.	0	1

Name	Info	Parameter Number	Default Value(dec)	Max Value(dec)	Min Value(dec)	Size	Read Only	Format	Altering capability
7210Th: wage	7210RangeSet	0x01	0	1	0	1	No read-onlY	Unsigned integer	true
72100P	72100PSet	0x02	640	19200 Or 192000	1	4	No read-only	Unsigned integer	true
Neopost	7210PolHystSe t	0x03	200	8960 Or 89600	1	4	No read-only	Unsigned integer	true

Lowa(Percent	LowBatAlarm	Ox0A	10	S	5	1	No read -only	Unsigned integer	true
BasicEnable	SendBasic	Ox0E	0	1	0	1	No read -onlY	Unsigned integer	true
Basleteverse	BasicValue	OxOF	0	1	0	1	No read -onlY	Unsigned integer	true
Bypass	BypassSet	0x20	0	1	0	1	No read -only	Unsigned integer	true
temp	TemperatureI nt o	0x21	15	255	15	1	No read -only	Unsigned integer	true
LodcCoring	LockConfigSe t	OxFE	0	1	0	1	No read -onlY	Unsigned integer	true

Documents / Resources

	LEEDARSON 7AA-SS-VE-A0 Bypass Door Window Sensor [pdf] User Guide 7AA-SS-VE-A0, Bypass Door Window Sensor