Rev. 1.0

SHARP

Motion Detect Sensor
User's Guide

Model: DN3G6JA084

Introduction

This document describes the Motion Detect Sensor (Model DN3G6JA084) overview and how to use the Z-Wave functionality.

Feature Overview

The Motion Detect Sensor is a product for IoT with a PIR motion detect sensor and with functions of Z-Wave communication. It can collect sensing data of human motion. And it sends the data to the gateway.

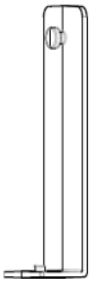
The Motion Detect Sensor has the following general features:

- Z-Wave communication
- Sensing with the following
  Motion detect sensor (PIR motion sensor),
  Tamper switch.

Packing List

Motion Detect Sensor

Sensor Stand

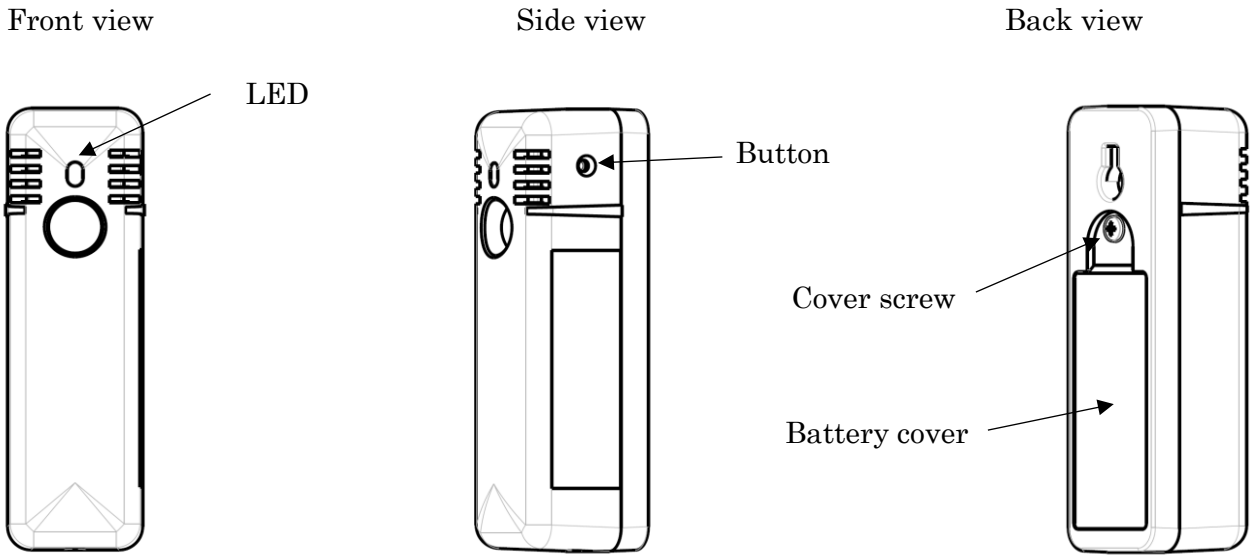


Double sided tape

For the Sensor

CR123A
(Battery)

Product Drawings



Installation

The installation of the Motion Detect Sensor is below:

Insert a CR123A to the battery holder.

Close the battery cover.

Tighten a cover screw.

The Motion Detect Sensor has no Power Switch. It will power up as soon as CR123A is inserted.

LED Normal Operation

- LED blinks when Z-Wave connection is NOT established.
- LED turns OFF when Z-Wave connection is established.
- LED turns OFF when a battery is not inserted.

  LED blinks fast at the time of setting the battery, if there is sufficient voltage.

Z-Wave Overview

General Information

Device Type

Sensor, Notification

GENERIC_TYPE : GENERIC_TYPE_SENSOR_NOTIFICATION

SPECIFIC_TYPE : SPECIFIC_TYPE_NOTIFICATION_SENSOR

Role Type

Reporting Sleeping Slave (RSS)

Command Class

Supported

COMMAND_CLASS_ASSOCIATION_V2

COMMAND_CLASS_ASSOCIATION_GRP_INFO

COMMAND_CLASS_BATTERY

COMMAND_CLASS_CONFIGURATION

COMMAND_CLASS_DEVICE_RESET_LOCALLY

COMMAND_CLASS_MANUFACTURER_SPECIFIC

COMMAND_CLASS_NOTIFICATION_V4

COMMAND_CLASS_POWERLEVEL

COMMAND_CLASS_SECURITY

COMMAND_CLASS_SECURITY2

COMMAND_CLASS_SUPERVISION

COMMAND_CLASS_TRANSPORT_SERVICE_V2

COMMAND_CLASS_VERSION_V2

COMMAND_CLASS_WAKE_UP_V2

COMMAND_CLASS_ZWAVEPLUS_INFO_V2

Security S0 Supported

Please refer to the list of “Security 2 supported”

Security S2 Supported

COMMAND_CLASS_ASSOCIATION_V2

COMMAND_CLASS_ASSOCIATION_GRP_INFO

COMMAND_CLASS_BATTERY

COMMAND_CLASS_CONFIGURATION

COMMAND_CLASS_DEVICE_RESET_LOCALLY

COMMAND_CLASS_MANUFACTURER_SPECIFIC

COMMAND_CLASS_NOTIFICATION_V4

COMMAND_CLASS_POWERLEVEL

COMMAND_CLASS_VERSION_V2

COMMAND_CLASS_WAKE_UP_V2

Inclusion and Exclusion

-Add (Inclusion)

Insert a CR123A, and LED blinks.

Set the controller to the status for “Add”.

Press the button over 3 seconds and release.

About “Add” is completed, LED turns off.

(If security include, LED turns off will soon after “Preparing inclusion” process.)

Note) After inclusion completed, this sensor keep waking about 40 seconds, for interview process.

During this time, button operation is disabled.

-Remove (exclusion)

Set the controller to the status for “Remove”.

Press the button over 3 seconds and release.

LED blinks when “Remove” is completed.

Wakeup Notification

Press the button one push and release.

“Wakeup Notification“ will be sent.

Terminology

The following terms are used in this documentation.

“Add” for inclusion; “Remove” for exclusion

Support for Association Command Class

Group id: 1 – Lifeline

Maximum number of devices that can be added to the group: 5

Events will trigger use of the Lifeline.

This sensor use only one

Interoperability

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

All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

Documentation for Configuration CC

Parameter number	2	
effect on the product	enable switch of ″Alarm Notification″ report	
default value	0x01	
size	1byte	
Possible value	value	MotionDetect
	0x00	OFF
	0x01	ON

Documentation related to BASIC commands

Basic command is NOT supported in this products because role type of this products is RSS.

Documentation for Factory Default Reset

Press the button over 10 seconds and release.

Please use this procedure only when the network primary controller like the gateway is missing or otherwise inoperable.

Documentation for Notification Types and Events

Notification is reported when events by motion detect sensor and tamper switch happen.

Notification type

Home Security (0x07)

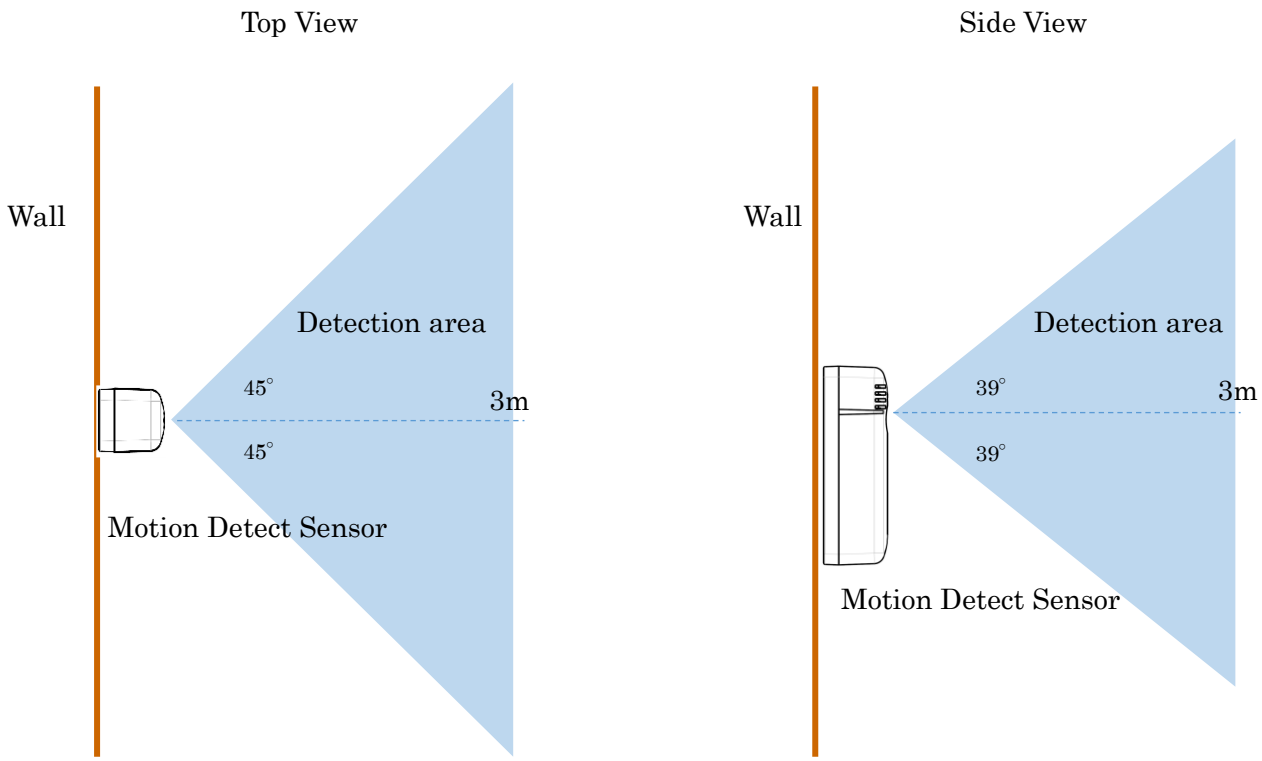
Event

Tampering, product cover removed (0x03) for tamper switch.

Motion Detection, Unknown Location (0x08) for motion detect sensor.

-Motion detect sensor

This sensor detects human motion in detection area (below) .



-Tamper switch

When the battery cover is opened or closed, the event is detected by tamper switch.

While the “Battery cover” is open, the sensor will always be in awake state.

And , report other than “Tamper” and "Wakeup"(every 60 second) will not be sent.

Security Enabled Z-Wave Plus Product

This device is a security enabled Z-Wave Plus product that is able to use encrypted Z-Wave Plus messages to communicate to other security enabled Z-Wave Plus products.

Security Enabled Z-Wave Controller must be used

This device must be used in conjunction with a Security Enabled Z-Wave Controller in order to fully utilize all implemented functions.