Nexia™ Temperature & Humidity Sensor

TH100NX Installer Guide

These instructions are ONLY for connecting the TH100NX to a new or existing Z-Wave network. This sensor CANNOT be used for HVAC control with Trane/American Standard connected thermostats. After installation, allow 10 minutes for the temperature readings to stabilize.

INSTALLATION

STEP 1 – Find the right location

Suggested criteria for finding the right sensor location to minimize unintended influences on sensor readings:
1. Do not place near a supply register.
2. Do not place near windows or on an exterior wall.
3. Do not place behind doors or where air flow can be blocked by furniture.
4. Do not place where it may be subject to unnecessary or extreme temperature changes.
5. The optimum zone for correct placement of the sensor is at least 5 feet above the floor and at least 2 feet below the ceiling.

STEP 2 – Remove the Back Plate

Insert a small screwdriver beneath the tab at the bottom of the Back Plate and lift to unsnap it from the Front Plate.

STEP 3 – Insert the supplied batteries

Two 1.5 Volt AAA batteries are supplied in the box.

STEP 4 – Put the Z-Wave bridge in Add mode

Press the **+** or "**Add Device**" button on the bridge.

STEP 5 – Add the sensor

Stand where the sensor is to be installed and press and release the "INSTALL" button on the interior of the sensor.

STEP 6 – Connection Status

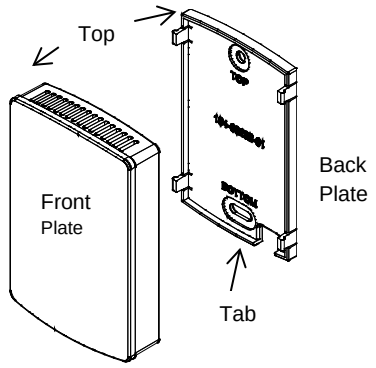
The status LED next to the button on the interior of the sensor will blink rapidly for 3 seconds when it has been added to your Z-Wave network.

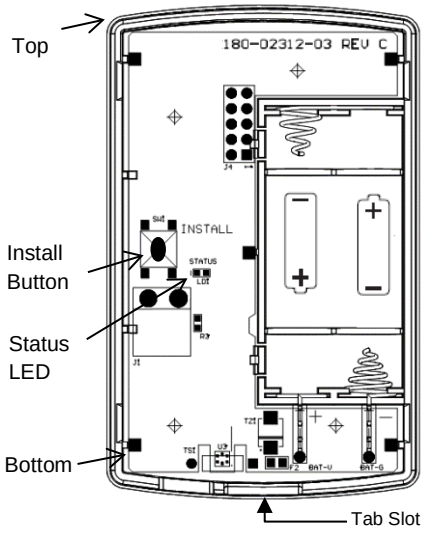
STEP 7 – Mount the Back Plate at the right location

Anchors and screws are provided to mount the Back Plate.

STEP 8 – Mount the Sensor

Once successfully added, snap the sensor onto the mounted Back Plate.





SUMMARY OF SENSOR OPERATION

INSTALL BUTTON – Function Overview

- Press once to add or remove the sensor from a Z-Wave network.
- Press and hold, approximately 10 seconds, until the STATUS LED starts blinking to restore factory defaults.
- Press three times rapidly to send a "BATTERY_REPORT" and "WAKE_UP_NOTIFICATION" when installed on a network.

STATUS LED – Function following a button press:

The LED will give an indication for 30 seconds following a button press. In that time the following will be seen:

- Continuous On: Device is added to a Z-Wave network
- Slow Blinking: Device is not added to a Z-Wave network
- Fast Blinking: Successfully added to or removed from a Z-Wave network

ADD – Adding the sensor to an existing Z-Wave network

1. Set your home's Z-Wave Bridge into ADD mode.
2. Press and release the INSTALL button on the sensor.
3. The Status LED will blink rapidly for 3 seconds when it has been added to your Z-Wave network. You bridge may also indicate that the sensor was successfully added.

REMOVE - Removing the sensor from a Z-Wave network

1. Set your home's Z-Wave Bridge into REMOVE mode.
2. Press and release the INSTALL button on the sensor.
3. The Status LED will blink rapidly for 3 seconds when it has been removed from your Z-Wave network. Your bridge may also indicate that the sensor was successfully removed.

FCC STATEMENT

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.

This equipment has been tested and found to comply with the limits for 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 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

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

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'encompromettre le fonctionnement.

TROUBLESHOOTING

SYMPTOM	CAUSE	CURE
Sensor fails to add to the network (slow blinking of the Status LED and no pairing action seen on the bridge)	Out of range	Add a Z-Wave repeating device (e.g. light module/dimmer) at a location between the bridge and the sensor. 1. Add a repeater to the network following that device's instructions. 2. Try to add the sensor to the network again at the desired sensing location.
	Improperly removed from network previously	1. Remove the sensor from the network following the steps in the "REMOVE" table. 2. Try to Add the sensor to the network.
Sensor drops connection intermittently	Edge of range	Add a Z-Wave repeating device (e.g. light module/dimmer) at a location between the bridge and sensor.
Button press ignored	Button press too fast or too slow	Use firm ½ second button press.

FACTORY RESET

Factory Reset should only be used when the primary controller is missing or otherwise inoperable.
Press and hold, approximately 10 seconds, until the STATUS LED starts blinking to restore factory defaults.

ASSOCIATION GROUP INFORMATION TABLE

Group	Profile	Command Classes	Group Name	Max Devices
1	Lifeline	Battery Report, Multilevel Sensor Report, Device Reset Locally Notification	Lifeline	1
2	Sensor	Multilevel Sensor Report	Temperature Reports	5
3	Sensor	Multilevel Sensor Report	Humidity Reports	5
4	Sensor	Basic Set	Temperature Driven Basic Sets	5
5	Sensor	Basic Set	Humidity Driven Basic Sets	5
6	Sensor	Battery Report	Battery Reports	5

Z-WAVE CONFIGURATION TABLE

Parameter	Description	Length (Bytes)	R/W	Default Value	Valid Values
1	Time between Battery Reports (hours)	1	R/W	0	0 = Do not send periodically; Range: 1–127 hours
2	Send BASIC SET ON above this temperature (See #20)	1	R/W	121	121 = Disabled; Range: 15 – 120° F
3	Send BASIC SET ON below this temperature (See #20)	1	R/W	121	121 = Disabled; Range: 15 – 120° F
4	Send BASIC SET OFF above this temperature (See #20)	1	R/W	121	121 = Disabled; Range: 15 – 120° F
5	Send BASIC SET OFF below this temperature (See #20)	1	R/W	121	121 = Disabled; Range: 15 – 120° F
6	Send multiple attempts for all BASIC SET commands	1	R/W	0	0 = Disabled; 1-5 = Number of extra attempts sent every minute after first send
7	Temperature Units	1	R/W	1	1 = Fahrenheit; 0 = Celsius
8	Association Group1 – Temperature delta auto send threshold	1	R/W	10	Range: 1 – 200; Parameter is in tenths of degrees.
9	Association Group1 – Periodic temperature send interval	1	R/W	0	0 = Disabled; Range: 1-120 minutes
10	Association Group2 – Temperature delta auto send threshold	1	R/W	10	0 = Disabled; Range: 1 - 50 Parameter is in tenths of degrees.
11	Association Group2 – Periodic temperature send interval	1	R/W	0	0 = Disabled; Range: 1-120 minutes
12	Send BASIC SET ON above this humidity (See #20)	1	R/W	0	0 = Disabled; Range: 1-100%
13	Send BASIC SET ON below this humidity (See #20)	1	R/W	0	0 = Disabled; Range: 1-100%
14	Send BASIC SET OFF above this humidity (See #20)	1	R/W	0	0 = Disabled; Range: 1-100%
15	Send BASIC SET OFF below this humidity (See #20)	1	R/W	0	0 = Disabled; Range: 1-100%
16	Association Group1 – Humidity delta auto send threshold	1	R/W	5	Range: 1-50%
17	Association Group1 – Periodic humidity send interval	1	R/W	0	0 = Disabled; Range: 1-120 minutes
18	Association Group3 – Humidity delta auto send threshold	1	R/W	5	0 = Disabled; Range: 1-30%
19	Association Group3 – Periodic humidity send interval	1	R/W	0	0 = Disabled; Range: 1-120 minutes
20	BASIC SET options for temperature and humidity	1	R/W	1	Configuration Register Combinations: 1 = Enable Registers 2, 5, 12 15 2 = Enable Registers 2, 5, 13, 14 3 = Enable Registers 3, 4, 12, 15 4 = Enable Registers 3, 4, 13, 14
21	Temperature Offset	1	R/W	0	Range: -7 to 7° F
22	Humidity Offset	1	R/W	0	Range: -7 to 7%
23	Humidity Filter Time Constant	1	R/W	30	Range: 1 – 60 minutes

Rev. 20180404
18-HD84D1-1A

Nexiahome.com
U.S.A. /Canada
(877) 288-7707

Z-WAVE PLUS

NEXIA HOME INTELLIGENCE
MORE THAN CONNECTED
CERTIFIED

Ingersoll Rand