Z-Wave Temperature & Humidity Sensor

ZSENS930AW00MA Installer Guide

IMPORTANT

This sensor should be installed by a qualified HVAC technician.

After installation, allow 10 minutes for the temperature readings to stabilize.

NOTE : Use thermostat software version **REL 5.1** or newer when using this sensor with a Trane/American Standard connected thermostat.

INSTALLATION – adding a ZSENS930 to a new or existing Z-Wave network

STEP 1 – Find the right location

Suggested criteria for finding the right sensor location when used to control a home or as a thermostat sensor:

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; unintended influences may cause adverse environment sensing.
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. WRITE DOWN the Serial Number from the Back Plate of the sensor.

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. Please see **Table 1.** for **824 or 850** and **Table 2.** for **1050** to proceed with adding to either Z-Wave enabled thermostat.

STEP 5 – Add the sensor

Stand where the sensor is to be installed and press and release the button labeled "**INSTALL**" 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

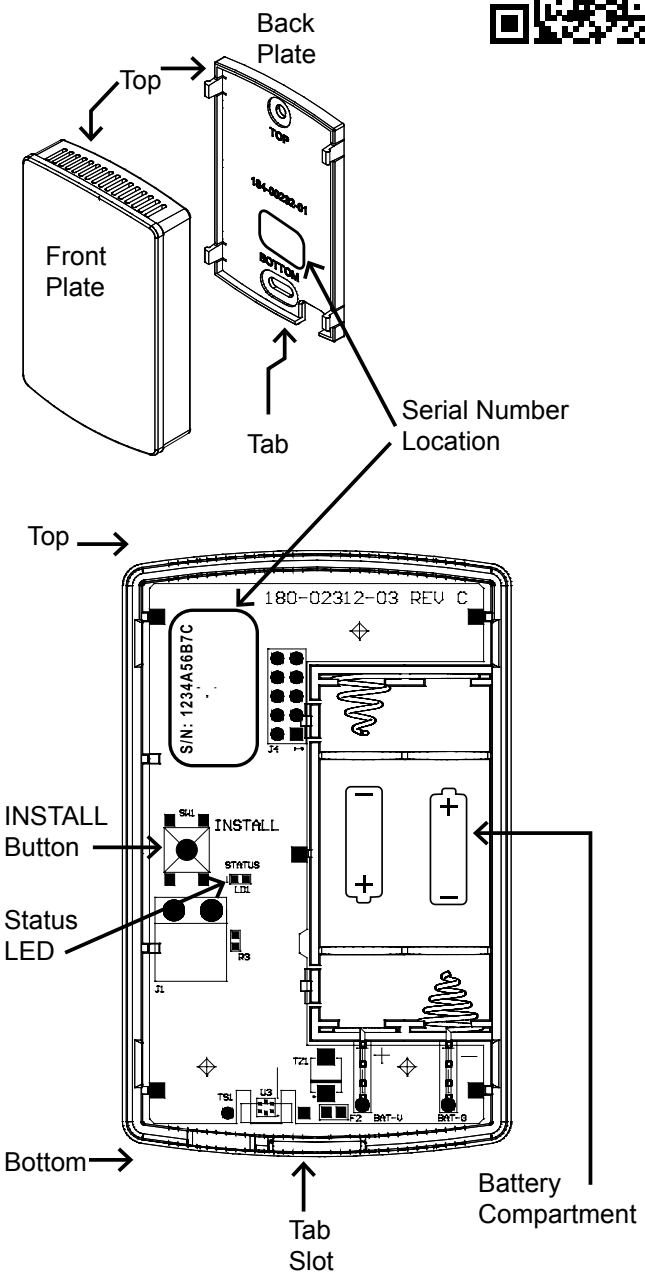
Anchors and screws are provided to mount the Back Plate.

STEP 8 – Mount the Sensor **FINAL INSTALLATION STEP**

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

It will take 10 minutes after installation for the temperature and humidity values to stabilize due to handling.

Scan the QR Code to view help videos



SERIAL# _____

ZONE _____ If Applicable

Home owner should retain this document for their records.

NOTES:

SERIAL#	SERIAL#
ZONE NAME	ZONE NAME
SERIAL#	SERIAL#
ZONE NAME	ZONE NAME
SERIAL#	SERIAL#
ZONE NAME	ZONE NAME
SERIAL#	SERIAL#
ZONE NAME	ZONE NAME

Note : Please see this link for video tutorials:
http://www.fieldtechhelp.com/comcon010.html
A QR Code at the top of this document is also available for your convenience.

The latest version of this document can be found on ComfortSite or ASDealernet.

Table 1. ADDING A ZSENS930 TO AN 824 OR AN 850 THERMOSTAT

TCONT824, ACONT824, TCONT850, ACONT850

STEPS ONE THROUGH SEVEN BELOW WILL REPLACE STEPS FOUR THROUGH SIX OF THE **INSTALLATION TABLE**.

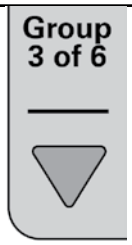
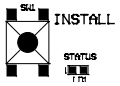
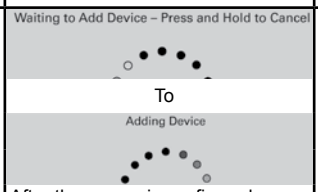
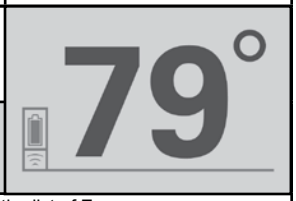
	STEP 1	**STEP 2**	**STEP 3**	**STEP 4**	**STEP 5**	**STEP 6**	**STEP 7**
	Access the "**Service Menu**"	Navigate to "**Sensor Settings**"	Access the "**Select IDT Sensor screen**"	Put the stat in Add mode	Add the Z-Wave sensor	On screen response	Assign the sensor to be the IDT Sensor
Action	Press "**Installer Setup"**	Press the "**Down Arrow**" <u>twice</u> for *Group 3 of (X)* Number of groups can vary.	Press the "**Edit"** button in the Nav Bar	Press "**Add New Wireless Sensor**"	Stand where the sensor is to be installed and press and release the button labeled "**INSTALL**" on the interior of the sensor.	When the sensor is discovered, the text at top of the screen should change from: **"Waiting to Add Device – Press and Hold to Cancel**" To: "**Adding Device**"	1. Select the Wireless Sensor that matches the 930's Serial Number. 2. Press "**Apply**" then "**Done**".
Button					 The STATUS LED will blink rapidly for 3 seconds.	 After the sensor is configured, "**Temperature Sensor Added as Node [x]: Sensor was added successfully.**" should appear.	 Then 
Optional setup paths		If setting up from the **Installer Wizard** start from Step Two.		Skip Steps Four through Six if Wireless Sensor is already added.			The Home Screen will show a new icon indicating the connection and battery status.

Table 2. ADDING A ZSENS930 TO A 1050 THERMOSTAT

TZON1050, AZON1050

STEPS ONE THROUGH FIVE BELOW WILL REPLACE STEPS FOUR THROUGH SIX OF THE **INSTALLATION TABLE**.



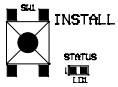
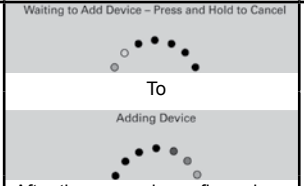
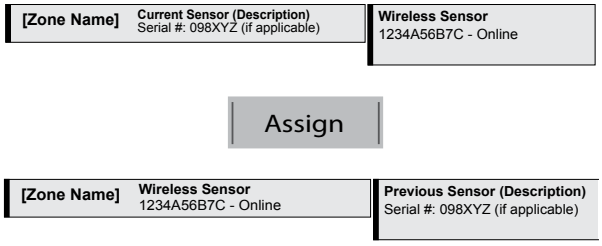
	STEP 1	**STEP 2**	**STEP 3**	**STEP 4**	**STEP 5**
	Access the "**Service Menu**"	Put the stat in Add mode	Add the Z-Wave sensor	On screen response	Assign the sensor to be the IDT/ Zone Sensor
Action	Press "**Indoor Sensor Setup"**	Press "**Add"**	Stand where the sensor is to be installed and press and release the button labeled "**INSTALL**" on the interior of the sensor.	When the sensor is discovered, the text at top of the screen should change from: "**Waiting to Add Device – Press and Hold to Cancel**" To: "**Adding Device**"	1. SELECT THE ZONE. Left column is the list of Zones. (A home with one system and no Zoning is considered to have one Zone). The green bar on the left is the selection indicator. 2. SELECT THE CONNECTED SENSOR. The right column contains the list of sensors available to each zone. It changes dynamically depending on which Zone is selected. 3. Select the wireless sensor that matches the 930 serial number. 4. Press "**Assign**" then press "**Done**".
Button			 The STATUS LED will blink rapidly for 3 seconds.	 After the sensor is configured, "**Temperature Sensor Added as Node [x]: Sensor was added successfully.**" should appear.	

Table 3. REMOVING AN "OFFLINE" SENSOR FROM THE SERVICE MENU

TCONT824, ACONT824, TCONT850, ACONT850, TZON1050, AZON1050

SENSOR NO LONGER REPORTS, DO NOT HAVE SENSOR, SENSOR FAILURE.

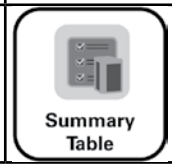
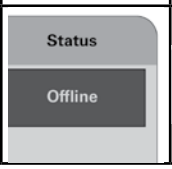
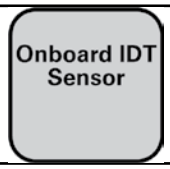
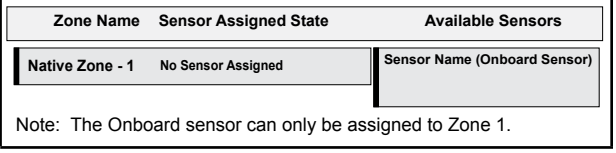
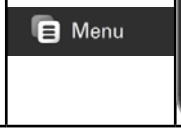
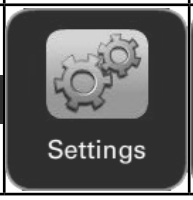
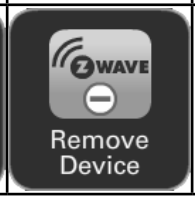
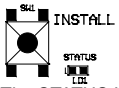
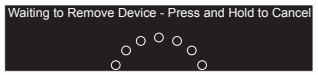
	STEP 1	**STEP 2**	**STEP 3**	**STEP 4 FOR 824/850**	**STEP 4 FOR 1050**
	Navigate to "**Summary Table**"	From the "**Summary Table**"	Remove the "**Offline**" sensor	Re-assign On-board sensor	Re-assign On-board sensor
Action	From the "**Service Menu**" press "**Diagnostics**" then "**Summary Table**"	Select "**Offline**" Sensor	Select "**Remove Selected Device**"	Follow **STEP 5.1** to **STEP 5.3** from **Table 1**. Select "**Onboard IDT Sensor**" and Press "**Apply**". Press "**Done**".	Follow **STEP 5.1** from **Table 2**. Select "**NativeZone - 1"** then **(Onboard Sensor)**". Press "**Assign**". Press "**Done**".
Button					 Note: The Onboard sensor can only be assigned to Zone 1.

Table 4. REMOVING AN "ONLINE" SENSOR

TCONT824, ACONT824, TCONT850, ACONT850, TZON1050, AZON1050

	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6
	From the "**Home Screen**" navigate to "**Menu**".	Navigate to "**Settings**".	Navigate to "**Z-Wave Settings**".	Put the bridge in Remove Mode.	Remove the sensor.	On screen response
Action	Press "**Menu**"	Press "**Settings**"	Press "**Z-Wave Settings**"	Press "**Remove Device**"	Press and release the "**INSTALL**" button on the interior of the sensor.	When the sensor is found, the text at the top of the screen will change from: "**Waiting to Remove Device – Press and Hold to Cancel**" To: "**Removing Device**"
Button					 The STATUS LED will blink rapidly for 3 seconds.	 After the sensor has been removed, "**Node [x] Device Removed from Network**" will appear briefly at the top of the screen. 

NOTE: This sensor can be added to any Z-Wave network. It can also be added to a Trane or an American Standard connected thermostat with a built in Nexia bridge then assigned as an indoor temperature sensor (IDT) from the Service Menu.

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" (if installed on a network). The sensor will stay awake for 30 seconds.

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 enrolled on a Z-Wave Network.
- Slow Blinking: Device is not enrolled on 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. Your bridge will 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 will also indicate that the sensor was successfully removed.

TROUBLESHOOTING

SYMPTOM	CAUSE	CURE
Sensor fails to add to the network. (slow blinking of the Status LED & 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 sensor. First add the repeater to the network following that device's instructions. Then try to add the sensor to the network again at the desired sensing location.
	Improperly removed from network previously.	Remove the sensor from the network, follow the steps in Table 3. Then add it back 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	Firm 1/2 second button press.
"Missing Sensor" alarm TSO.001.00	Sensor is enabled but offline (not reporting).	Change the batteries in the sensor.
		Remove the offline sensor following the steps from Table 3 then reinstall or add a new sensor.
		Add a signal repeater.
"Low Battery" alarm TSO.004.00	Sensor is reporting a low battery.	Change the batteries in the sensor.

FACTORY RESET

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

**** FOR INDOOR USE ONLY ****

SPECIFICATIONS

SIZE (INCHES):	3.25 X 2.0 x 0.60	POWER:	2 X AAA Alkaline Batteries
WEIGHT:	0.25 LBS	RF:	Z-WAVE ZM5202,US 908.4 MHz / 916 MHz

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.

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	0 = Celsius; 1 = Fahrenheit
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

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

18-HD83D1-5 Rev. 20180404

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

Z-WAVE PLUS

NEXIA MORE THAN CONNECTED CERTIFIED

Ingersoll Rand Inspiring Progress™