Z-Stick 10 Pro user guide

Modified on: Thu, 6 Nov, 2025 at 2:25 PM

Z-Stick 10 Pro was developed to control actuators and sensors in both Z-Wave Plus Series 800 as well as Zigbee 3.0 as a self-powered Home Automation USB Adapter. It is powered by both Z-Wave 800 and Zigbee 3.0.

The **technical specifications of Z-Stick 10 Pro** **(https://aeotec.freshdesk.com/a/solutions/articles/6000274576)** can be viewed at that link.

Important safety information.

Please read this and other device guides carefully. Failure to follow the recommendations set forth by Aeotec Limited may be dangerous or cause a violation of the law. The manufacturer, importer, distributor, and/or reseller will not be held responsible for any loss or damage resulting from not following any instructions in this guide or in other materials.

Keep product and batteries away from open flames and extreme heat. Avoid direct sun light or heat exposure. Improper battery use may damage the product.

Z-Stick 10 Pro is intended for indoor use in dry locations only. Do not use in damp, moist, and / or wet locations.

Getting Started with Z-Stick 10 Pro.

The setup of Z-Stick 10 Pro is fairly complex as its own Do-it-yourself (DIY) option, we will provide guides and steps to setting up your Z-Stick 10 Pro to utilize both Z-Wave and Zigbee 3.0 using the most recommended free software, Home Assistant.

The Zigbee 3.0 and Z-Wave 800 networks can be considered two different products rolled into one.

1. Plug Z-Stick 10 Pro into a host controller and **find the serial port identifier** (that can be a PC, Mac, RPi, etc):

- **Windows** - Open up "**Ports & LPT**" under **Device Manager**. The Z-Stick 10 shows as a **COMX** device (where X can be a number value range of 0 - 1000).
    - Z-Wave may show up as COM6 (COM numbers depend on the USB port used
    - Zigbee 3.0 may show up as COM5 (COM numbers depend on the USB port used)

- **Linux** - under your command prompt, type in "**dmesg | grep tty**" which will give you a list of all tty devices connected. Z-Stick 10 Pro will show as a "**ttyUSB0**" device.
    - Z-Wave may show up as ttyUSB1
    - Zigbee 3.0 may show up as ttyUSB0
- **OSX** - Choose **Apple > System Preferences**, then click "**Network**". You can find Zi-Stick as a USB Modem device
    - Can be listed as (two devices will appear with different numbers, one will be Z-Wave and the other as your Zigbee 3.0 network):
        - /dev/cu.usbmodem-XXXX (where XXXX can be a combination of a number 0-9 such as 1229)
        - /dev/cu.usbserial-XXXX (where XXXX can be a combination of a number 0-9 such as 4211)
        - /dev/tty.usbserial-XXXX (where XXXX can be a combination of a number 0-9 such as 6921)

2. Optional but highly recommended - Update Z-Stick 10 Pro Z-Wave and Zigbee firmware.

- Update Zigbee to 7.4.3
    - **Use Teraterm to Update** (https://aeotec.freshdesk.com/a/solutions/articles/6000279311?portalId=6000039922)
- Update Z-Wave to 7.23.2
    - **Use PC Controller 5 in Windows to Update** (https://aeotec.freshdesk.com/a/solutions/articles/6000279576?portalId=6000039922)

3. Install the DIY Host Software that you plan on using, we recommend Home Assistant:

- **Install Home Assistant** (https://aeotec.freshdesk.com/a/solutions/articles/6000274640?portalId=6000039922)

4. Setup Z-Stick 10 Pro Z-Wave network and **Zigbee** network separately in Home Assistant:

- Setup Z-Wave
  - **Setup ZWaveJS UI in Home Assistant Add-on** (https://aeotec.freshdesk.com/a/solutions/articles/6000274641?portalId=6000039922)
    - If you already have a Z-WaveJS UI network running, you can follow the **Series 500/700 Z-Wave USB Adapter migration guide** (https://aeotec.freshdesk.com/support/solutions/articles/6000279670-migrate-z-wave-network-series-500-700-to-z-stick-10-pro)

- Setup Zigbee
  - **Setup Base Zigbee Integration in Home Assistant** (https://aeotec.freshdesk.com/a/solutions/articles/6000274642?portalId=6000039922)
  - **Setup Zigbee2MQTT Integration in Home Assistant OS** (https://aeotec.freshdesk.com/a/solutions/articles/6000275568?portalId=6000039922)

Advanced use.

SerialAPI-Mode.

To initiate SerialAPI-Mode, plug Z-Stick into the USB connector of the host (i.e. PC, Mac, or Gateway).

- While in SerialAPI-mode, Z-Stick is always listening (it is awake and always in RX receive mode) for instructions and acts as a Z-Wave and/or Zigbee 3.0 adapter. It'll respond to commands sent through USB by the host processor software.
- Z-Stick 10 Pro will appear as two different serial ports, one is used for Zigbee and the other is used for Z-Wave.
  - ie: ttyUSB0 may be Z-Wave, and ttyUSB1 may be Zigbee 3.0

Drivers for Z-Stick 10 Pro.

Typically you do not need to install drivers, most operating systems will have the drivers necessary to run the Z-Stick 10 Pro. But if installing the driver is needed, you can find the **www.silabs.com** CP2102N serial adapter driver here:

- (https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers) (https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers)**SiLabs CP2102N Driver** (https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers)

Using Z-Wave Long Range with Z-Stick 10 Pro.

Z-Stick 10 Pro supports both Z-Wave Long Range and Mesh networks which can operate within the same network. Long Range devices form a star network with all Long Range devices attempt to directly communicate with Z-Stick 10 Pro, while the typical mesh network will operate all non-LR Z-Wave devices as normal.

Long Range devices will never act as a repeater as a part of the mesh network, but it is possible to pair a Long Range compatible Z-Wave device within the normal mesh network.

In order to pair a Z-Wave device with Long Range:

- The Z-Wave device being paired must support Long Range.
- Long Range must use SmartStart to pair in Long Range mode.
- The software connected must support SmartStart Long Range pairing.

You can find more information on how you can pair **using Long Range here using ZWaveJS UI (https://aeotec.freshdesk.com/support/solutions/articles/6000276870--z-wavejs-ui-long-range-pairing-with-dsk-code)**.

Development/Debug tool for Z-Wave.

You can utilize PC Controller 5 or previously known as Zensys Tools to be used as a debug or testing tool for any Z-Wave device. PC Controller 5 allows a bare basic interface that will allow you to further explore Z-Wave and how it communicates, and even control or test specific functions of any Z-Wave device.

You can find steps to getting your hands on the tool here: **PC Controller 5 (https://aeotec.freshdesk.com/support/solutions/articles/6000226205-z-wave-command-class-configuration-tool-download-)**.

You'll need to download Z-Wave development environment **Simplicity Studio** in order to access all public development tools.

Z-Wave Best TX Power Levels.

Recommended Power Levels for EU or US Frequency:

- Normal Power Level = 14 dBm
- Measured output power = 0 dBm
- Maximum LR Power Level = +14 dBm

Reset your Z-Stick 10 Pro.

The Z-Stick 10 Pro has two different networks that it will run separately, depending on which part you need to factory reset, the steps will differ depending on the Z-Wave software and Zigbee software that you are using with your Z-Stick 10 Pro.

Z-Wave and Zigbee act independently so in order to fully reset, you need to operate your Zigbee software and Z-Wave software individually to factory reset their individual networks.