

# Z-WAY CIT

## CERTIFIED INSTALLER TOOLKIT

# QUICK START

Full Product Manual:

[www.digitalhomesystems.com.au/documentation/ZWave\\_CIT\\_USER\\_MANUAL\\_v3.0.6.pdf](http://www.digitalhomesystems.com.au/documentation/ZWave_CIT_USER_MANUAL_v3.0.6.pdf)

Version 1, Basis: v3.0.6, June 5, 2020

## INTRODUCTION

Developed by the Z-Wave Alliance as a Diagnostics & Repair Tool for Z-Wave Networks; the

**Z-Way CIT Certified Installer Toolkit** is a powerful, versatile tool for every installer:

- Comprehensive network diagnostics & device management, accessible from anywhere in the world
- Rapidly identifies potential problems
- Spectrum analyser shows noise in the Z-Wave channels
- Routing table displays which nodes are neighbours
- Network map graphically displays how nodes are connected to each other

- Z-Wave network sniffer (ZNiffer) will show what is actually sent by nodes and identify the type of message
- Displays advanced node information such as device version, battery level, Z-Wave library version, and more
- Access to Z-Wave device product information including manuals and technical data
- The CIT may be left at a site for long-term testing allowing you to connect to it remotely
- The CIT is Z-Wave Plus certified as a controller
- As a fully capable controller it can set configuration parameters and communicate with all nodes on the network, including those using Z-Wave S0 security
- The CIT is currently available in North American, European and Australia/New Zealand radio frequency

## KNOWN LIMITATIONS

As most of the diagnostic features used by the Z-Way CIT are available to controllers, use the **Z-Way CIT** when the manufacturer of your customer's gateway controller does not have diagnostic tools embedded into it, or when the diagnostic tools are a smaller subset of what the Z-Way CIT offers.

***The Z-Way CIT cannot get information from the nodes of a Z-Wave network where Silicon Labs has not provided a mechanism to do so.***

This is an important note because: The Z-Way CIT will present information such as a neighbor table, but the neighbor table was obtained from the Z-Way CIT itself; it is not possible to get the **actual** neighbor table from the customer's primary controller because there

currently is no mechanism to get this information. If the Z-Way CIT is placed physically near the customer's primary controller or the node being examined, then the Z-Way CIT will present a good approximation of what the customer's controller or device should also be experiencing. Z-Way CIT will present as much information as it can, but in a network made up of a mix of newer Z-Wave nodes and those from several years ago, features that do not exist in the older nodes may prevent useful information from being able to be retrieved or measured.

## FIRST CONNECTION

Please connect your CIT tool to your LAN with DHCP server via Ethernet. Power up the CIT via micro USB port. Wait about two minutes for the CIT to boot-up. On a computer operating in the same LAN network, go to the following URL in your browser:

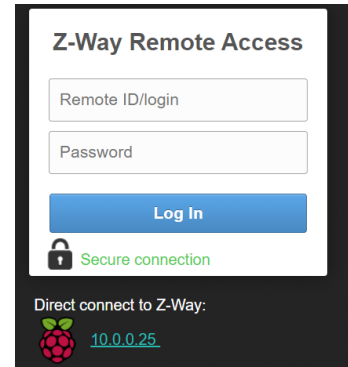
<https://find.z-wave.me/zboxweb/en/>

This tool will help you to find a local IP address of your new CIT unit. You should see similar screen as the screenshot on the right. Click on IP hyperlink for Direct connect to Z-Way.

Alternatively, check on your router the local IP address assigned to the CIT. Then, in your browser on a computer in the same LAN network connect to the CIT using this URL:

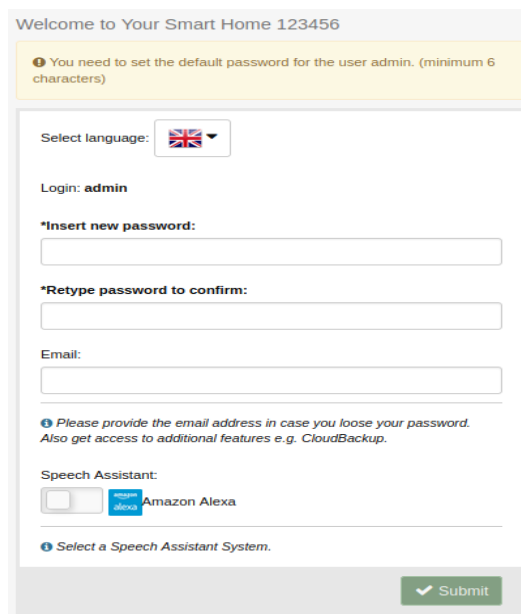
**[http://your\\_CIT\\_IP:8083](http://your_CIT_IP:8083)**

where ***your\_CIT\_IP*** is a local IP address of your CIT.



## INITIALIZATION

Z-Way CIT is a multi-platform server for managing and diagnosing smart home systems built on Z-Wave, in this manual we will consider the use of Raspberry Pi 3 Model B+ with a radio module board Z-Wave RaZberry. Instructions for downloading and installing the server on Raspberry Pi and other platforms are available at: <https://z-wave.me/z-way/download-z-way/> When the Z-Way CIT is activated, it requires that you initialize it and assign it to the person who will be using it. The Z-Way CIT registration screen appears and looks like this:



- When you first turn on Z-Way CIT will try to get the remote access ID, it will be indicated at the top of the registration window.
- **Your default login in Z-Way CIT is ‘admin’ and password “welcome1”**
- Set the administrator password, the password must not match the login.
- To use CloudBackup and receive notifications, enter your e-mail.

Complete the registration process by clicking



at the bottom of the page. If there are any issues with the registration, a message will be displayed.

## LOGIN

If the Z-Way CIT has already been registered, then connecting to the Z-Way CIT interface will

Welcome to Your Smart Home 123456

Login

Password

Remember me

[Forgot your password?](#)

Gateway ip address: 192.168.0.10

Login

lead to being prompted for your login credentials. The login screen looks similar to this:

Here at the login screen, the remote ID.

- Enter your Username and Password – the same ones used to register the Z-Way CIT – to log on to the Z-Way CIT.

To complete the login, click the Login button.

## USING THE Z-WAY CIT

As described in the menu section below, the Z-Way CIT has a menu bar which divides the features of the Z-Way CIT into functional areas. This section describes each of those functional areas and the capabilities within each area.

Z-Way CIT has 2 user interfaces:

Smart Home UI and Expert UI. The smart home UI is the ultimate solution for the average user.

Expert UI allows you to diagnose, configure devices and associations.

**In this manual, the Expert UI will be considered primarily. After you have logged in, the Smart Home UI will open by default, in order to switch to Expert mode, add after the address of your controller /expert**

**Example: 192.168.1.10:8083/expert**

**You can also get into the expert interface in this way:**



## MENU

Smart Home UI:



Expert UI:

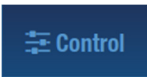


The main menu (shown above) is always visible. The main menu provides direct access to the functional categories and common information about the Z-Way CIT. The menu features are as follows:

- The **Home icon**, which looks like a house, takes you to the home screen of the Z-Way CIT where you can see network information.



- In the **Control** section, you can monitor devices, view sensors and meters, control switches, dimmers, thermostats and locks.



- The **Device menu** item provides access to device related sub-menus of Status, Type info, Battery and Active associations.



- In the **Configuration** section, there is a list of all connected Z-Wave devices, in this section you can see detailed information about the device, set configuration parameters, configure associations, check communications, use command classes and update firmware.



- The **Network menu** item provides access to Z-Wave network related sub-menu of Control, Neighbors, Reorganization, Timing Info, Route map, Link Status and Controller Info.



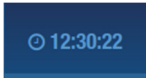
- The **Analytics menu** item provides access to the analytical sub-menu of Ziffer, Background Noise, Noise Meter, Ziffer History and Statistics.



- The **time** is displayed in the menu according to the display format chosen in the System settings. The time can be set to be set automatically if there is an Internet connection available, or manually through the System settings when an Internet connection is not available. If the time is set to automatic and no Internet connection is available



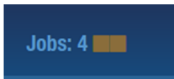
to the Z-Way CIT, the time display will not be correct.



- The **Gear (Setup) icon** item provides access to the system setup page and the setup functions which include Language, System settings and Report Problem.



- The **Jobs display and link** shows the current number of active jobs in the job queue of the Z-Way CIT. Clicking on the word Jobs will open a new window in your browser and display the Jobs queue with detailed information about the jobs currently active or jobs waiting to be completed.




## Setup


Click on the 'gear' icon to access the Z-Way CIT setup.



### Language

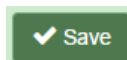
By clicking icon  **Language** will take you to the language setting for the user interface of the Z-Way CIT. Select your language by clicking on the flag

## System Settings


Clicking on  **System settings** will open them up or close them depending upon their current state. When opened, you will see settings as shown here:

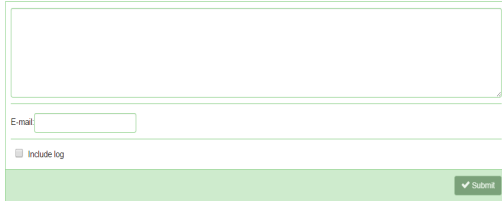
- **Date format** – Choose the date format that you desire for the date to be shown in the top menu bar of the Z-Way CIT user interface.
- **Time format** – Choose the time format that you desire for the time to be shown in the top menu bar of the Z-Way CIT user interface.
- **Time zone** – The time zone setting is only enabled if the Automatic Time Synchronization is turned on. Use this to set the time zone to the desired time zone that the Z-Way CIT operates in. Changing this setting will force a restart of the Z-Way CIT.

Click the 'Save' button at the bottom of the System settings when you are done changing the settings. Some setting changes may force a restart of the Z-Way CIT.



### Report Problem

Click  [Report Problem](#) to open the problem report submission form. This should be used to report a problem that could not be solved by the local distributor of Z-Way CIT. Problem reports are sent to the manufacturer of the Z-Way CIT. The problem report submission form:



To

complete a problem report:

- Enter text in the large box that explains the problem, the steps you have taken that led to the problem, and whether you are able to reproduce the problem. If you have specifics regarding the controllers or devices that you were working with at the time of the problem, please include that information as well. This information is required in order to be able to submit a problem report.
- Enter your e-mail address in the e-mail box. The Submit button at the bottom will not enable until a valid email address has been entered.
- Check the “Include log” checkbox by clicking on it, to have a portion of the Z-Way CIT internal log included with the problem report submission. This log is often the key to allowing the

factory to diagnose what went wrong. Z-Wave network keys are not included in the log.

- Click the button at the bottom right to complete the problem report submission – you must have Internet access for the Z-Way CIT to submit a problem report.



## Resources

- Official site of the Z-Way CIT project: <https://z-wave.me/>
- Here you can find the Z-Way CIT version for your equipment. The core development focuses on the image for the Raspberry 3b / 3b + / 4. Z-Way CIT can also work on Linux and Windows operating systems. <https://z-wave.me/z-way/download-z-way/>
- The official forum for installers and users of Z-Way: <https://forum.z-wave.me/>
- For feedback on this documentation, write to us at [support@z-wave.me](mailto:support@z-wave.me)
- Z-Wave.me distributor in Australia, New Zealand: <https://www.digitalhomesystems.com.au/products/z-wave-certified-toolkit-cit>