



Programming Steps • Installation Notes • Integration Tips

Z-Wave Manager Guide

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TERMINOLOGY

Z-Wave Device

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.

The Z-Wave functionality for Inclusion (The process of adding a node/device to the Z-Wave network) is referred to as ADD/INCLUDE.

The Z-Wave functionality for Exclusion (The process of removing a node/device from the Z-Wave network) is referred to as REMOVE/EXCLUDE.

The Z-Wave functionality for Replication (The process of copying network information from one controller to another) is referred to as COPY.

The ZW-9 is a Security Enable Z-Wave Plus Product.

The ZW-9 Z-Wave Interface Module is referred to as the ZW-9 throughout this document.

Chapter 1. Introduction

Overview

RTI specializes in control products for automating the operation of audio, video, and environmental management systems such as lighting and HVAC. Offering solutions for residential, commercial and hospitality applications, RTI products are uniquely designed to meet the needs of the electronics installation professional while providing a simplified interface for the end-user. The Z-Wave Manager program is used during the installation process of the RTI Control Products to configure the Z-Wave Wireless Network and Z-Wave Compatible Devices.

Hardware/Software requirements

To use this software, you will need a ZW-9 Z-Wave Interface Module, a network switch or router and one of the RTI Advanced Control Processors:





ZW-9 Z-Wave Controller



The ZW-9 requires two connections. One connection to a 5 Volt power supply adapter which plugs into the 120 VAC main supply, and a standard Cat-5 Ethernet network cable which connects the ZW-9 to the Network Router or Switch.

NOTE:

The ZW-9 must be connected to the same network as the XP Control Processor. For best performance, the ZW-9 device should be installed in a central location in the building

Installation

The Z-Wave Manager program is installed with the latest version of the RTI Integration Designer programming software (v9.x or APEX).

Z-Wave Manager is designed to operate on the following Microsoft Windows Operating Systems:

Windows XP Service Pack 3 (32 bit or 64 bit)

Windows Vista Service Pack 2 (32 bit or 64 bit)

Windows 7 (32 bit or 64 bit)

Windows 8.0 8.1 (32 bit or 64 bit)

Windows 10 (32 bit or 64 bit)

Chapter 2. Getting Started

Z-Wave Network

A typical Z-Wave network installation includes one primary controller, possible secondary controllers which may include a secondary inclusion controller, and the actual Z-Wave slave devices. A total of 232 devices in the network are possible, including all slave devices and the controller devices.

Controller

The ZW-9 is designed to be a Z-Wave primary controller used to setup and control a Z-Wave Network. If an existing Z-Wave network is present the ZW-9 device can be added and take on the role as the primary Z-Wave controller or as a secondary Z-Wave controller.

The ZW-PRO is a USB device designed to be a temporary secondary inclusion controller that can Add/Include and Remove/Exclude devices from the Z-Wave network.

Its main purpose is to include and remove devices (ex. door locks) that require close proximity during setup. It does not remain as a permanent part of the network. After its use, it is removed from the network and can be used in the setup and installation of other Z-Wave networks.

The ZW-9 Controller Device and Z-Wave devices.

The Z-Wave Controller will create a HomeID (8 hex digit number) that uniquely identifies the Z-Wave network.

In a new installation the ZW-9 will have the Device ID of 1. As Z-Wave devices are added to the network they are assigned a Device ID from 2 to 232. Device ID's are assigned sequentially and are not reused even if a device is removed so it is possible that devices in a network may not have consecutive Device ID numbers. After Device 232 is added, any unused node numbers will then be used. If the maximum number of devices (232) is reached, you will not be able to add any additional devices.

If more than 232 Z-Wave devices are needed, a second ZW-9 can be installed. The second ZW-9 will establish a new second Z-Wave Network that will have a different HomeID. These two Z-Wave networks would not communicate with each other, but with the RTI XP Processor these two Z-Wave networks could be controlled and operated as one complete system.

In an existing installation where a Z-Wave network is already setup and the ZW-9 is being added as a secondary controller, the ZW-9 will be assigned a Device ID by the existing primary controller and will not have a Device ID of 1.

If a Z-Wave Device such as a Door Lock is already installed, and it is out of range of the ZW-9, a repeating Z-Wave device must be installed between the ZW-9 and the Z-Wave device (door lock) before it can be added to the Z-Wave Network.



STATUS LED: (Red)

- This LED should remain solid whenever there is an active program communication between the processor and the ZW-9.
- This LED will blink whenever there is NO active program communication between the processor and the ZW-9.



- This LED indicates Data transmission over the Z-Wave RF network.
- This LED will blink whenever there is active communication between the ZW-9 and another Z-Wave device on the same Z-Wave network.



• This LED indicates data communication via the Ethernet port. This LED should blink constantly when there is a working connection on the Local Area Network.



Start Up / Quick Start

First make sure the ZW-9 is powered and connected to the same network as the computer that will run the RTI Integration Designer program.

Inside Integration Designer (In the System Workspace) select the Control System Processor (XP3, XP8s, etc.) that you have added to your system. The Control System dialog box will appear, and on the bottom select the Expansion tab to add the ZW-9 Z-Wave Controller to the system.

Control System [OfficeX	P3]		- • •
🗣 Add Expansion Device	🔍 ab Edit Expansion Device	🔍 Delete Expansion Device	
]
System Macros Events	Expansion Drivers		

Now select the Add Expansion Device and then select the ZW-9 device from the list as shown below.



Once selected the Z-Wave Manager interface of Integration Designer will be launched.

Once activated the Z-Wave Manager program will first try to detect any ZW-PRO devices connected to the computer through a USB interface.



After this step it will try to detect any ZW-9 Devices connected to the local Ethernet network.



When the ZW-9 device detection is complete the main screen will be displayed.

With the dialog show below displaying the detected ZW-9 device connected to your system.

evices four	d on the local netwo	ork:	
Interface	IP Address	MAC Address	Device Type
Wireless	10.0.116.3	00-15-26-09-30-B0	ZW-9
Wireless	10.0.0.244	00-15-26-00-00-E5	ZW-9
Wireless	10.0.124.110	00-15-26-00-00-15	ZW-9
Ethernet	10.0.116.3	00-15-26-09-30-B0	ZW-9
Ethernet	10.0.0.244	00-15-26-00-00-E5	ZW-9
Ethernet	10.0.124.110	00-15-26-00-00-15	ZW-9
Connec	ct to Selected Devic	e	Close

Normally there would only be one ZW-9 device shown.

If your system has both a wired Ethernet connection and a Wireless network connection, then the ZW-9 Device would appear twice, once for the Ethernet connection and once of the Wireless connection. A wireless connection would be the better choice when using a Laptop computer to move around the location for the initial setup and configuration of the Z-Wave Devices installed.

Select the Ethernet network adapter (Wired or Wireless) to be used to make the connection with the ZW-9 Z-Wave Controller device.

Your device can be identified by the MAC Address which is labeled on the back of the ZW-9 device.

From the main menu select Communications, Show Devices on Local Network or select the Controller Toolbar icon A dialog box will be displayed allowing the selection of the PC network adapter to be used for communicating with the ZW-9. This dialog will refresh every 2 seconds with any newly detected devices.
 Z-Wave Controller devices (ZW-9) are listed with the PC interface type (Wireless or Ethernet), IP Address, and MAC Address. If the computer being used has both a wired and a wireless Ethernet adapter interface enabled, the same Z-Wave Controller may be displayed on both interfaces and can be controlled through the interface selected.

Click on the desired ZW-9 and select the **Connect to Selected Device** button, or double click the desired ZW-9 in the list. After the ZW-9 is selected, a connection is made.

A dialog box will display the total number of devices detected while the ZW-9 collects the detailed information about each device. On the initial setup the only detected device would be the ZW-9 Controller itself. On future launches of ZWaveMgr from Integration Designer it will automatically detect the ZW-9 device and connect with it and start the device detection process and match it against the Project file that is being used. To verify that the ZW-9 Home ID and device list match the Project file that was loaded in Integration Designer.

Example of the device detection process:

Devices		
	Detecting Available Devices	
	Total Devices: 7	
	Collecting Information on Device: 2	
Abort		

If there are any battery-operated Z-Wave devices in the Z-Wave network a dialog box will pop up during the detection process letting you know that a button press on the device is necessary to wake up the device to read its current status and settings. If the device is already installed and not available within close range, click the cancel button on this dialog box, to skip collecting the current information from this device.

Devices			
Detecting Available Devices			
Total Devices: 13			
Collecting Information on Device: 16			
Abort			
Device: 16 Sensor Alarm(16)			
Please press button on device to wake it up !			
Then immediately press the OK button below			
Cancel OK			
Select Cancel to ignore this device.			
Ignore All Battery Devices			

It is possible to have the battery devices ignored during the detection process by selecting **Ignore Battery Devices** from the Communications menu. Or by clicking the Ignore Battery Devices icon on the controller toolbar or . When this icon is green, the program will prompt the user to wake up the device by activating the device wake up (usually a button press). When this icon is red, the program will not prompt the user to wake up the device and no information is retrieved from the device. Checking the Ignore All Battery Devices in the above dialog box has the same effect as selecting **Ignore Battery Devices**. This setting is maintained across new ZWaveMgr launches as a convenience feature.

A list of the detected devices will be displayed on the left side of Z-Wave Manager. For a new installation or after a ZW-9 reset (see next section for reset instructions), only the ZW-9 device will be listed. If the Z-Wave network has many devices or there are devices that are not working properly, the process for detecting all of the Z-Wave devices will take longer to complete.

Example display with multiple devices added by the ZW-9.

Integration Designer - Z-Wave Manager			
File Device Communica	ations Help	Connected: 10.0.0.188	
🤅 💾 🛗 🔜 🗰 🕴 Control	ller 🗟 🛥 🗿 👂 ‰ ≒ 窩 🗄 ZW-PRO 🕂 — 🗿 🎾		
ZW-9 00-00-83(1) Power Switch Binary(2) Print Thermostat Heating(3) The Basic Wall Controller(5)	ZW-9 00-00-83(1) HomeID: C08786E2 Network Adapter: Intel(R) Ethemet Connection I217-LM HomeID: C08786E2 Device: 1 Name ZW-9 00-00-83(1) Role: Primary Scenes Select Scene: Scene 1: Scene #1 Scene #1 Scene #1 Scene #1 Scene #1 Name ZW-9 00-00-83 Role: Primary 	Name/Notifications Clear List 2/17/2017 3:46:01 PM: Device 2 SWITCH BINARY Report ON @ 255 2/17/2017 3:46:09 PM: Device 2 SWITCH BINARY Report OFF 2/17/2017 3:46:09 PM: Device 2 METER REPORT: 1 2/17/2017 3:46:09 PM: Device 2 METER REPORT: 1 2/17/2017 3:46:10 PM: Device 2 METER REPORT: 1 2/17/2017 3:46:12 PM: Device 2 METER REPORT: 1	
	Select Device(s) to Add to Scene: Add Devices In This Scene: Remove Selected Device Remove All Device # Name State Level Dimming Duration	Switch All SWITCH ALL On SWITCH ALL Off Get SWITCH ALL settings for all Supported Devices Device # Name Mode 2 Power Switch Binary(2) Excluded from All On and All Off Device # Dev	
		Device Excluded from All ON and All OFF Functionality Excluded from All ON but Not All OFF Included in All ON and All OFF functionality Get SWITCH ALL settings for Selected Device Set SWITCH ALL settings for Selected Device	
III Devices Location	Update Scenes for all Scene Devices Simulate Scene Activate Deactivate Set Global Units Temperature Scale: F C	RF Power Get RF Power 0	
DOVICES ECONICIT			

If the ZW-9 has been programmed previously, it may contain information on device(s) that no longer exist or that don't match the ZW-9 device list. In this case it may take a long time during the Device Detection process (example shown below). In this situation, select the Abort button on the detection dialog box to cancel the device detection.

File Device Communications Help Connected	
	10.0.1.16
🔛 🔠 🔣 İİİİ (Controller 🔠 由 👌 乡 % 🖘 第 ZW-PRO 🕂 — 🍈 🎾	
Lips ZW-9 00-00-83(1) HomeID: D6FA9F4F Aarms/Notifications Clear List To Scene Switch IP: 10.0.1.16 12/8/2016 9:18:09 AM: Device 1 NIF-Button Press 12/8/2016 9:18:09 AM: Device 1 NIF-Button Press	
Binary(2) Network Adapter: Intel(R) Ethemet Connection I217-LM MAC: 00-15-26-00-00-83 Device: 1 Name [ZW-9 00-00-83(1) Role: Primary	
Scenes Select Scene 1: Scene#1	
Select Device(s) to Add to Scene:	
Device 2: Scene Switch Binary(2) Add Switch All	
Get SWITCH ALL cettions for all Supported Devices	
	_
2 Scene Switch Binary(2) Excluded from All On and All Off	
Devices In This Scene: Remove Selected Device Remove All	
Device # Name State Level Dimming Duration	
	E
Device	
Excluded from All ON and All OFF Functionality Excluded from All ON but Not All OFF	
Included in All ON and All OFF functionality Excluded from All OFF but Not All OF	
Get SWITCH ALL settings for Selected Device	
Set SWITCH ALL settings for Selected Device	
Update Scenes for all Scene Devices Simulate Scene Activate Deactivate Get RF Power Get RF Power	
Set Global Units	
Temperature Scale:	
Veripolitatie ocale: T C C Powerlevel 0 Powe	
Start Power Level Test	
Get Power Level Test Results	
	-
	•

For a new Installation it will be necessary to reset the ZW-9 Controller to a known state.

This is done by selecting the Reset Controller/Start New Installation from the main menu.



Or by selecting the Reset Controller Icon on the Controller Toolbar.



A Dialog Box will be displayed asking to confirm this selected operation.

Controller Reset	Resetting Controller
Reset the Controller This will remove all Devices from the Network and Start a New Installation. May also require a Power Cycle of the Controller Device! Are You Sure? Yes No	Waiting for Reset Acknowledgement Abort

After selecting YES, about 10 seconds later the reset should be completed.

This process assigns a new HomeID to the ZW-9.

After the reset, only the ZW-9 will be listed in the device list.

Integration Designer - Z-Wa	/ave Manager	
File Device Communic	ations Help	Connected: 10.0.0.188
🗄 💾 🛗 🔜 🖬 🗄 Contro	oller 🗟 🛥 🗿 🗲 🎄 ≒ 😫 🗄 ZW-PRO 🕂 — 🕤 🎾	
ZW-9 00-00-83(1)	ZW-9 00-00-83(1) HomeID: D6768F27 Network Adapter: Intel(R) Ethemet Connection I217-LM P:: 10.0.0.188 Device: 1 Name ZW-9 00-00-83(1) Role: Primary	Aarms/Notifications Clear List
	Scenes Select Scene: Scene#1 Select Device(s) to Add to Scene:	
	Add	Switch All SWITCH ALL On SWITCH ALL Off Get SWITCH ALL settings for all Supported Devices
	Devices In This Scene: Remove Selected Device Remove All Device # Name State Level Dimming Duration	Device # Name Mode
		Device Excluded from All ON and All OFF Functionality Excluded from All ON but Not All OFF Included in All ON and All OFF functionality Excluded from All OFF but Not All ON Get SWITCH ALL settings for Selected Device Set SWITCH ALL settings for Selected Device
	Update Scenes for all Scene Devices Simulate Scene Activate Deactivate Set Global Units Temperature Scale: F C	RF Power Get RF Power 0 - Normal 255 - Timeout (sec) Set RF Power PowerLevel Test • O - Power level • Power level • O - Number of Test Frames
Control C		Get Power Level Test Results

Now the process of adding Z-Wave devices to the project can begin.

Configuring the Z-Wave Network and Adding Devices

The process of configuring the new Z-Wave network and adding devices can now be started.



The DEVICE menu contains:

Add/Include 🛅

Add/Include a device into the Z-Wave network.

NOTE:

If a device was previously added/included into a different Z-Wave network it may be necessary to remove the device first to place it into a known state. Sometimes even new devices that have just been opened will be in this state. Therefore it may be a good practice to remove a device before adding it to the network. Or if there is an issue with adding a device to the network make sure you execute the removal process first before trying other troubleshooting techniques.

To add a device to the Z-Wave network make sure that the device is properly installed and has power. If it is a battery operated device make sure that the batteries have a good power level.

Start the Add/Include process by selecting Device-Add/Include from the main menu or by selecting the

Add/Include button both on the main toolbar. A dialog box will display a single device or multiple devices may be added as shown below.

Add/Include Device	Add/Include Device
Waiting for the Device Information.	Waiting for the Device Information.
Activate the Include Process on the Device to	Activate the Include Process on the Device to
ADD	ADD
Close	Close
Device:2 Scene Switch Multilevel(2)	Device:3 - Scene Switch Multilevel(3) Device:4 - Scene Switch Binary(4) Device:5 - Scene Switch Binary(5) Device:6 - Scene Controller(6) Device:7 - Switch Binary(7) Device:8 - Siren(8) Device:9 - Sensor Notification(9) Device:10 - Power Switch Binary(10)
Name for Device: Scene Switch Multilevel(2)	Name for Device: Power Switch Binary(10)

Once this dialog box is displayed, activate the include process on the device (usually some type of button press). See the device documentation for details.

It may take a few moments for the device to show up in the list. Depending on how many devices are already in the network and what type of device is being added to the network. Security devices will typically take a little longer. When a device is successfully added you will also hear a beep sound from the computer. Wait a few moments after activating the include process before trying to activate the include process a second time. If you do activate the include process a second time and the first attempt was successful, the program will indicate that the device has already been included with an entry in the list showing the device (i.e. "Device Already Included: 9 Switch Binary (9)").

If you are using a Wi-Fi network it is possible to carry the laptop to the installed devices and add them to the network.

If there is only a wired network it may be helpful to turn the computer's volume up. This way as you leave the computer to walk around to add devices to the network you can hear the beep signaling a successful add/include process of a device.

As devices are included in the Z-Wave network they are added to the Device List.

You can assign a name for each device as it is added, to avoid have to recall the order in which you added the devices. Just click on the device in the Add/Include Dialog box and enter in a new name for the device.

After all of the device(s) have been included close the dialog box. You will know see the device(s) listed in the Device List on the left side of the Z-Wave Manager program window.

See the sections on the specific device types for details about configuring the added device(s).

Remove/Exclude 🔜

Remove/Exclude a device from the Z-Wave network.

The remove/exclude process is very similar to the add/include process.

Remove/Exclude Device	Remove/Exclude Device
Waiting for the Device Information.	Waiting for the Device Information.
Activate the Remove Process on the Device to	Activate the Remove Process on the Device to
REMOVE	REMOVE
Close	Close
Removed Device: 3 Sensor Notification(3)	Removed Device: 3 Sensor Notification(3)
	Removed Device: 2 Power Switch Binary(2)
	Removed Device: Unknown

Once this dialog box is displayed, activate the exclude process on the device (usually some type of button press). See the device documentation for details. A single device may be removed, or multiple devices may be removed while this dialog box is open as shown above on the right.

As devices are removed from the Z-Wave network they are removed from the Device List.

Refresh Device 🖒

Refresh the device by collecting the device's information from the Z-Wave network through the ZW-9. If it is a battery operated device and the Ignore Battery device wake up is activated vou will be prompted to uncheck the Ignore Battery.

Need to uncheck Ignore Battery!	
ОК)
	Need to uncheck Ignore Battery!

If the Ignore Battery device wake up is not activated¹ you will be prompted to wake up the device.

Wake Up Device	
Device: 22 Routing Alarm	Sensor(22)
Please press Button on Device t	o Wake it UP !
Then immediately Press OK Bu	utton below
Cancel	ОК
Select Cancel to ignore this device.	

Remove Failed Device 💳

Remove a failed (non-responding) device from the Z-Wave network.

Selecting this option will first display a dialog box to confirm the removal process.

Force Re	Force Removal		
?	Force Removal of Device: 22 Named: Routing Alarm Sensor(22) Are You Sure?		
	Yes No		

After selecting yes the following dialog box will be displayed as the removal process takes place.

Removing Failed Device	
Removing Device: 22	
Named: Routing Alarm Sensor(22)	
Processing	

It will first require verifying that the device is not responding and is truly a failed device. If it was a failed device the dialog box will close and the device will be removed from the Device List. However if the device is responding to commands over the Z-Wave network the following dialog box will be displayed and it will be necessary to use the normal remove/exclude device process.

Force Re	Force Removal	
<u> </u>	Device 20 Named: Scene Switch Multilevel(20) is Responding and cannot be removed As a Failed Device. Use the REMOVE button from the top toolbar if you need to remove this device.	
	ОК	

Replace Failed Device 🖆

Replace a Failed device with a replacement device is used to replace a failed device that is no longer functioning, from the Z-Wave network and replace it with a new device, keeping the same Device ID. The replacement device should be identical to the failed device type, otherwise the rest of the RTI configuration (Integration Designer) will have to be changed/modified to reflect any differences.

The Replace Failed Device performs a test to verify that the device is truly nonfunctional.

Upon selecting this option you will be prompted with the following dialog box.

sBefore starting this process is it best to make sure that the new device has been removed from any Z-Wave network by using the Remove/Exclude process on the new device.



After selecting yes if the device is responding OK you will see the following dialog box, indicating that the device is currently communicating over the Z-Wave network.

ſ	Replace Device	
	<u>^</u>	Device 20 Named: Scene Switch Multilevel(20) is Responding and cannot be Replaced As a Failed Device Use the REMOVE button from the top toolbar if you need to remove this device.
		ОК

If the device does communicate over the Z-Wave network but has some other defect and you wish to replace it, then you must use the normal Remove/Exclude process to remove the device. You will not be able to replace it with another device and keep the same device ID. However, if you wish to keep the same device ID you could first power off the old device and then execute the Replace device procedure.

If the device was a failed device then the following dialog box will be displayed.

Replace Failed Device		
Replacing Failed Device: 20		
Named: Scene Switch Multilevel(20)	L	
Please Wait		
Abort		

Once it has been determined that the device was a failed device the following dialog box will be displayed.

Replace Failed Device
Replacing Failed Device: 20
Named: Scene Switch Multilevel(20)
NOW ACTIVATE the Add/Include Process on the New Replacement Device.
Abort

At this point you should then activate the Add/Include process on the new device. Once the device has been successfully replaced the dialog box will close and the Device List will show the replaced device in the Device List.

Retrieve Device Information

Retrieve Device Information will collect all the details about the selected device that are needed to complete the device configuration in Integration Designer. A dialog box will be displayed as the information is collected.

Device Information Retrieval	
Processing: Device 8 Siren(8)	
Collecting: Command Class Versions	L
Versions: Collecting	l
Supported: COMMAND_CLASS_MANUFACTURER_SPECIFIC	
Abort	

Retrieve All Device Information

Retrieve All Device Information will collect all the details about the all the devices included except for battery devices (Battery device's information will have to be collected manually for each battery device, since they require the wakeup process). A dialog box will be displayed as the information is collected.

C	Device Information Retrieval	
ſ	Processing: Device 3 Scene Switch Multilevel(3)	
l	Collecting: Command Class Versions	L
	Versions: Collecting	l
l	Supported: COMMAND_CLASS_SWITCH_ALL	
	Abort	
L		

This process collects the information from each device this is needed for the configuration in Integration Designer.

Chapter 3 – Z-Wave Manager and Network Configuration

Program Layout



The Window space has 5 major components:

The Main Menu Bar.

The Toolbars: Main Toolbar, Controller Toolbar, and ZW-PRO Toolbar.

Left Panel containing the Device List.

Center Panel containing the main controls for the selected device in the Device List.

Right Panel containing the Device Details about the currently selected device in the Device List.

Contains items such as Configuration Parameters, Multi Channel Information, Notifications, Indicators, RF Power, etc.

The Device icon and descriptive text in the Device List will be highlighted for the currently selected device. Devices highlighted in **Red** indicate there was a communication error with the device.

TOOL BARS



There are three Toolbars which contain the most commonly used functions from the program menu.

The Main toolbar contains: Save Project Add/Include Device Remove/Exclude Device Ignore Battery Device Wake Up	🗄 🔛 🔡 💽 🗰
The Controller toolbar contains: Show Controllers on Local Network Network Settings Reset Controller/Start New Inst Become a Secondary Controller Become the Primary Controller Add Secondary Controller Add Primary Controller	Controller 🗟 🛥 🔊 🗲 🎄 ≒ 📚 vork 🗟 allation Ö (Learn Mode) 🗲 (Learn Mode) %
The ZW-PRO toolbar contains: Add ZW-PRO to Controller + Remove ZW-PRO from Controll Reset ZW-PRO Remove Failed ZW-PRO	er 🗖

For operation of the individual toolbar items see the <u>MENUS</u> Section.

Context Menu Pop-Ups

In the Device List, Right Clicking on the top Controller Device will activate the Controller Pop-up Menu.



Device Properties will display a dialog box with the details about the ZW-9 Z-Wave Interface Module.

Refresh Device will do a rescan of all the Devices on the Z-Wave network collecting information about each device that is found. If battery devices are included in the network and the Ignore Battery Device Wakeup is NOT selected then you will be prompted to activate the wakeup of each battery device in the network. If the Ignore Battery Device Wakeup is selected each battery device will be skipped and its information will not be collected.

Update Scenes will update all devices with the Scene information.

Retrieve All Device Information will retrieve the information from all devices (Except Battery devices) needed for Integration Designer to complete the System Configuration.

In the Device List, Right Clicking any Device will activate the Device Pop-up Menu for controlling the Device options.



Device Properties will display a dialog box with the detail about the selected device.

Refresh Device will do a rescan of the selected device. If the device is a battery device and the Ignore Battery Device Wakeup is NOT selected then you will be prompted to activate the wakeup of the battery device. If the Ignore Battery Device Wakeup is selected the battery device will be skipped and its information will not be collected.

Remove Failed Device will remove a device that is no longer functioning from the Z-Wave network.

Replace Failed Device is used to replace a failed device that is no longer functioning from the Z-Wave network and replace it with a new device, keeping the same Device ID. The replacement device should be identical to the failed device type, otherwise the rest of the RTI configuration (Integration Designer) will have to be changed/modified to reflect any differences.

Retrieve Device Information is used to retrieve the information needed for Integration Designer to complete the System Configuration.

In the Device List, Right Clicking the ZW-PRO device will activate the ZW-PRO Pop-up Menu.



Device Properties will display a dialog box with the detail about the selected ZW-PRO device.

Add Device using the ZW-PRO will add/include a device into the Z-Wave network using the ZW-PRO.

Remove Device using the ZW-PRO will remove/exclude a device from the Z-Wave network using the ZW-PRO.

Refresh ZW-PRO will refresh the Device list for the ZW-PRO device.

Remove ZW-PRO from the Controller will remove the ZW-PRO device from the Z-Wave network.

Reset ZW-PRO will reset the ZW-PRO device. This is normally done when the ZW-PRO device is first added to the Z-Wave network.

Remove Failed ZW-PRO will allow you to remove a failed ZW-PRO device that is not responding correctly.

MENUS

FILE Menu



The FILE menu contains:

Save Project Honormal Exit process.

Save the current project. If new devices have been added or others removed, you will be prompted to save the ZW-9 Controller Device Recovery Information. This saves the critical information needed to restore the ZW-9 device if it was damaged or fails to function normally. You will also receive this prompt if it has been longer than 10 days since the last Device Recovery Information has been collected.

Device R	lecovery
?	There is no Device Recovery Information! Do you want to save the ZW-9 Device Recovery Information? This will take approximately 15 seconds.
	Yes No

It will quickly process each of the 255 blocks of Device Information Recovery data.

ontroller Recovery Inform	nation	
Collecting Information		
Block: #28		
	Abort	

Exit 🕑

Exit the Z-Wave Manager program.

Any changes will be saved upon returning to Integration Designer to complete the System setup process. If the current project contains a ZW-PRO device, you will be prompted to remove the ZW-PRO device before exiting. See <u>COMMUNICATIONS – ZW-PRO Sub-Menu</u> for details.

DEVICE Menu



The DEVICE menu contains:

Add/Include 记

Add/Include a device into the Z-Wave network.

Remove/Exclude 🔜

Remove/Exclude a device from the Z-Wave network.

Refresh Device 🖒

Refresh the device by collecting the device's information from the Z-Wave network through the ZW-9.

Remove Failed Device -

Remove a failed (non-responding) device from the Z-Wave network.

Replace Failed Device 🖆

Replace a Failed device with a replacement device is used to replace a failed device that is no longer functioning, from the Z-Wave network and replace it with a new device, keeping the same Device ID. The replacement device should be identical to the failed device type, otherwise the rest of the RTI configuration (Integration Designer) will have to be changed/modified to reflect any differences.

The Replace Failed Device performs a test to verify that the device is truly nonfunctional.

Retrieve Device Information

Retrieve Device Information is used to retrieve the information needed for Integration Designer to complete the System Configuration.

Retrieve All Device Information

Retrieve All Device Information is used to retrieve the information from all devices (Except Battery devices) needed for Integration Designer to complete the System Configuration.

Device Properties 🎤

Device Properties will display a dialog box with the details about the selected device. Each device's properties dialog will remain open until it is closed or the Z-Wave Manager program closes. This allows you to view the device details side by side to view any differences between devices.

يو آ	Device: 1	×
-		
	ZW-9 00-00-83(1)	Close
	⊡. Device: 1	
	MAC: 00-15-26-00-00-83	
	···· HomeID: CEB42BE6	
	IP: 10.0.1.16	
	Device Type: ZW-9 Firmware Version: 1.00.20	
	Properties:	
	🚍 Capability	
	···· Listening: True	
	··· Routing: True	
	Max baudrate: 40K	
	Protocol Version: Z-Wave version ZDK 4.5x and ZDK 6.0x	
	Concert 1000mer Enland	
	Sensor 250ms; False	
	Beam canability: True	
	Specific Device: True	
	- Controller: True	
	Reserved: False	
	Prop 1	
	Speed Ext: 100 kbps	
	Basic: STATIC_CONTROLLER	
	Generic: STATIC_CONTROLLER	
	···· Specific: GATEWAY	
	🖻 Command Classes:	
	Gupported Command Classes: 10	
	- SECURE Command Classes:	
	Supported SECURE Command Classes: 1	
	Emuse	
	Library: Version 1	
	Protocol: Version 4 24	
	Firmware0: Version 4.36	
	Hardware: Version C1	
	Target Versions:	
	Target 1: Version 1.00	
	Manufacturer ID: 0255=Remote Technologies, Inc.	
	Product ID: 0001 ZW-9	
	Product Type: 0001	
	Network Role	
	CONTROLLER_NODEID_SERVER_PRESENT	
	CONTROLLER_IS_REAL_PRIMARY	
	CONTROLLER_IS_SUC	
	····· NO_NODES_INCLUDED	

COMMUNICATIONS Menu

Integration	gration De	signe	r - Z-Wave Manager		
File	Device	Con	nmunications Help		
1 🖬 🗎	🔠 🔜 🛙	品	Show Controllers on Local Network		z
		-	Network Settings		F
	ZW-9 00-0	ð	Reset Controller/Start New Installation		
<i>™</i> , 1	Thermostat		Ignore Battery Devices		
õ		$n\frac{w}{h^2}n$	ZW-PRO	►) (
	Power Swit	÷	Controller Change	۲	F
	Scene Swit	1	Restore ZW-9		

The COMMUNICATIONS menu contains:

Show Controllers on Local Network 🖪

This will display the dialog box showing the currently detected ZW-9 Z-Wave Interface Modules on the network.

De	Devices on Local Network				
	Devices foun	d on the local netw	rork:		
	Interface	IP Address	MAC Address	Device Type	
	Ethernet	10.0.0.188	00-15-26-00-00-83	ZW-9	
1	Ethernet	10.0.116.3	00-15-26-09-30-B0	ZW-9	
	Ethernet	10.0.244	00-15-26-00-00-E5	ZW-9	
	Ethernet	10.0.249	00-15-26-00-00-F2	ZW-9	
	Connec	ct to Selected Devi	ce	Close	

This dialog is updated every 4 seconds. If a ZW-9 is detectable through the Ethernet or Wireless Interface on the computer then the ZW-9 will be listed twice and the connection to the device can be done through either interface depending on which one is selected. The best way to identify a ZW-9 device is by its unique MAC Address (MAC address can be found in the ZW-9 packaging).

Network Settings 📥

Network Settings is used to set whether the ZW-9 uses DHCP to get a network IP address or Static IP.

Network Settings				
 Use DHCP Use Static IP 				
IP Address:	10 🔔		0 *	104 🚊
Netmask:	255 🌲	255 💂	255 🚖	0
Gateway:	192 🛓	168 🛓		1
	ОК	Ca	incel	

If the ZW-9 has been set to use a Static IP and the assigned Static IP address is no longer valid for the local network. The ZW-9 can be returned to use DHCP by following these steps.

Power off the device.

Press and hold the Reset button.

Apply power and continue to hold the Reset button for approximately 5 seconds, then release the reset button. Releasing the Reset button after 5 seconds will result in the device rebooting and using DHCP to obtain an IP address on the network.

Reset Controller/Start New Installation 🔊

Reset Controller/Start New Installation is use to set the ZW-9 to Defaults. This allows the setup of a new Z-Wave network configuration. The ZW-9 will become the primary controller, all Z-Wave devices will be removed from its memory and a new HomeID will be assigned.

Use with Caution! You will be prompted to confirm this operation.

Controller Reset	Resetting Controller
Reset the Controller This will remove all Devices from the Network and Start a New Installation. May also require a Power Cycle of the Controller Device! Are You Sure? Yes No	Waiting for Reset Acknowledgement Abort

Ignore Battery Devices

When checked¹, the prompt to wake up battery operated devices will be ignored and those devices will not be updated.

When unchecked¹, you will be prompted to wake up a battery operated device when communications are needed to send or collect information.

ZW-PRO 😤

Sub menu for interfacing to the ZW-PRO device. See <u>COMMUNICATIONS – ZW-PRO</u> Sub-Menu for details.

Controller Change 5

Sub menu for interfacing to the Controller Change functions. See <u>COMMUNICATIONS – CONTROLLER</u> <u>CHANGE</u> Sub-Menu for details.

Request Network Update

Is used to request a network update of the ZW-9 Controller when it is a Secondary Controller in the network. This menu option will only be visible if the ZW-9 Controller has been setup as a Secondary Controller in the Z-Wave network.

Restore ZW-9

ZWaveMgr will prompt you to save the Recovery Information any time that it is determined that the information needs to be updated. If the ZW-9 fails for some reason and needs to be replaced, this Recovery information can be used to replace the damaged ZW-9 and have your Z-Wave network back up and operating without having to go through the process of removing and re-adding each Z-Wave node device. See <u>Save Project This Operation is perform on the normal Exit process</u>.

To Restore the ZW-9 to a saved working state follow these steps. Step 1

Obtain a new working ZW-9. Remove the damaged ZW-9 from the network and replace it with the new working ZW-9.

Step 2

Launch Integration Designer and Select the Edit Expansion Device to launch ZWaveMgr. You will be presented with the following Dialog Box indicating that the old ZW-9 device was not found.

Device N	lot Found
	Could NOT find a Controller Device which matches the MAC Address: 00-15-26-00-00-84 Make sure the the device is connected to the network!
	ок

Just click the OK button to acknowledge.

Then from the Menu select Communications - Restore ZW-9.

The following dialog box will be display asking for confirmation:



Click OK to continue.

The next dialog will explain that you need to select the correct newly install ZW-9 Controller device.

Restore	Controller
	From the next Dialog Box select the Controller to be Restored Make sure that this is what you really want to do! The Controller you select should be the new Replacement Controller. Make sure that you select the correct Controller!
	OK Cancel

Click OK to continue.

The dialog box will detect and show all available ZW-9 devices. Confirm the MAC address for your new ZW-9 device that you just setup and connected to your network.

Devices four	id on the local netwo	ork:	Sca	anning.
Interface	IP Address	MAC Address	Device Type	
Wireless	10.0.0.218	00-15-26-00-00-82	ZW-9	_
Wireless	10.0.124.110	00-15-26-00-00-15	ZW-9	
Wireless	10.0.0.244	00-15-26-00-00-E5	ZW-9	
Ethernet	10.0.116.3	00-15-26-09-30-B0	ZW-9	:
Ethernet	10.0.0.218	00-15-26-00-00-82	ZW-9	
Ethernet	10.0.124.110	00-15-26-00-00-15	ZW-9	
Ethernet	10.0.0.244	00-15-26-00-00-E5	ZW-9	

Then Select the device in the list and click the "Connect to Selected Device" button, or double click the correct device in the list. (In this example the New ZW-9 device has a MAC Address of 00-15-26-00-00-82).

You will then be given the last chance to abort this operation. Only continue if you are sure.

Restore (Controller
	Last chance to Cancel.
	This process will read the information from the Project File and verify that it contains a valid Image to Restore. If verification is Successful the Image will be written to the Controller. Do you want to continune?
	Yes No

Several dialog boxes will be displayed shown the progress of the Restore Operation.
Restoring Controller	
Image being restore was dated: 02/23/2017 11:36	
Restoring Block #49	
Abort	
Restore Controller	
Please wait approximately 30 seconds then Reconnect with the Controller	
ОК	

After wait 30 seconds click the OK button, ZWaveMgr will redetect the ZW-9 Devices and try again to match the Original MAC Address of the original old (damaged ZW-9) device. And indicate that the device could not be found.

Device Not Found	
Could NO 00-15-26- Make sure	find a Controller Device which matches the MAC Address: D-00-84 the the device is connected to the network!
	ОК

Click OK to close the dialog box.

Then from the menu select Communications - Show Controllers on Local Network. The new dialog box will scan you network to detect the available ZW-9 devices.

D	Devices on Local Network							
	Devices foun	d on the local netwo	rk:					
	Interface	IP Address	MAC Address	Device Type	-			
Ŀ	Wireless	10.0.0.244	00-15-26-00-00-E5	ZW-9				
	Wireless	10.0.0.218	00-15-26-00-00-82	ZW-9				
	Wireless	10.0.116.3	00-15-26-09-30-B0	ZW-9	=			
	Wireless	10.0.124.110	00-15-26-00-00-15	ZW-9				
	Ethernet	10.0.0.218	00-15-26-00-00-82	ZW-9				
	Ethernet	10.0.116.3	00-15-26-09-30-B0	ZW-9				
Ŀ	Ethemet	10.0.124.110	00-15-26-00-00-15	ZW-9	-			
	Connect to Selected Device Close							

Select the new ZW-9 Device based on the MAC Address.

(In this example the New ZW-9 device has a MAC Address of 00-15-26-00-00-82). ZWaveMgr will then determine that this new ZW-9 has the correct HomeID from the project file.

Integration Designer - Z-Way	ve Manager	
File Device Communicat	ions Help	
🗄 💾 🛗 🔜 🖬 🗄 Controlle	er 🗟 🖶 🗿 🗲 🏇 ≒ 😤 🕴 ZW-PRO 🕂 💳 🕤 🎾	
ZW-9 00-00-84(1) Power Switch Binary(2)	ZW-9 00-00-84(1) HomeID: FDD6DF09 Network Adapter: Intel(R) Ethemet Connection I217-LM IP: 10.0.0.218 Device: 1 Name ZW-9 00-00-84(1)	
	Scenes Select Scene: Scene#1 Select Device(s) to Add to Scene: Add	

You will notice that the MAC address displayed for this device is the new ZW-9 MAC Address. In this example the New ZW-9 MAC address is 00-15-26-00-00-82.

The Old ZW-9 MAC Address was 00-15-26-00-00-84. In this example the ZW-9 device NAME was never changed from the original default assigned name "ZW-9 00-00-84(1)" which contains the last 3 sets of digits from the MAC Address followed by the device ID (1) of the ZW-9 Controller device.

You most likely would have given your original ZW-9 a descriptive name, so that same name would still exist for your new ZW-9 replacement device.

At this point you can exit ZWaveMgr and go back to Integration Designer to make any necessary changes.

Your system should be back in working order.

COMMUNICATIONS – ZW-PRO Sub-Menu

Integration Designer - Z-Wave Manager								
File Device Communications Help								
i 🖿 i 🗃 🔜 i i	8	Show Controllers on Local Network ZW-PRO 🛨 🗕 🖏 🏂						
Network Settings								
ZW-9 00-00	ð	Reset Controller/Start New Installation				HomeID: D6768		
Thermostat	Ignore Battery Devices				emet Connection I217-LM MAC: 00			
	- ZW-PRO			+	Add ZW-PRO to Controller			
Power Swit	¢‡	Controller Change		-	Remove ZW-PRO from Controller			
Scene Swit Restore ZW-9					Reset ZW-PRO			
Power Switch Binary(5)								

The ZW-PRO USB adapter device is used to add/remove devices from the Z-Wave network that must be in close proximity during the add/remove process (ex. Door locks). If the ZW-PRO was inserted before the Z-Wave Manager program was started you should see the ZW-PRO options on the menu and toolbar enabled.



If the ZW-PRO was not inserted you will have

you will have 🕴 ZW-PRO 🕂 — 🕤 🎾

If you insert the ZW-PRO device after the Z-Wave Manager program has started it will auto detect the device and Reset it to a known state. You would see the following dialog box.

Resetting the ZW-PRO Device	dama di tana
Resetting the ZW-PRO Device	
	Abort

After this dialog box closes the menu and toolbar options for the ZW-PRO should now be enabled.

The COMMUNICATIONS – ZW-PRO submenu contains:

Add ZW-PRO to Controller 🕇

This will add a ZW-PRO USB adapter device to the ZW-9 as a secondary Inclusion Controller.

ZW-PRO as Secondary Controller	Adding ZW-PRO to Controller
	Controller is in Include Mode
Are your sure you want to Add the ZW-PRO Device as a Secondary Controller?	LEARN MODE STARTEDwaiting
Yes No	

Once the ZW-PRO is added successfully you should see the ZW-PRO listed on the left in the Device List.

Integration Designer - Z-Wave Manager							
File Device Communications Help	Connected: 10.0.0.188						
🗄 💾 🛗 Controller 🖾 🛥 🗿 🗲 🏇 ≒ 😵							
ZW-9 00-00-83(1) ZW-PRO 1.00 US(6)							
Themostat Heating(2)							
Power Switch Binary(3)							
Scene Switch Multilevel(4)							
Power Switch Binary(5)							
ZW-PRO 1.00 US(6) — Device: 1 ZW-9 00-00-83(1) — Device: 2 Themostat Heating(2) — Device: 3 Power Switch Binary(3) — Device: 4 Scene Switch Multilevel(4) — Device: 5 Power Switch Binary(5) — Device: 6 ZW-PRO 1.00 US(6)							
Devices Location							

On the right side will be the details about the ZW-PRO device which should contain the listing of all the devices on the Z-Wave network.

To add/include a device using the ZW-PRO take the laptop computer with the ZW-PRO installed near the Z-Wave device to be added and click the button "Add Device using ZW-PRO". You will be presented with the same Add/Include dialog box that is displayed during the normal Device Add/Include process as described in <u>Add/Include</u>. Follow those procedures for Adding a device.

To remove/exclude a device using the ZW-PRO click the button "Remove Device using the ZW-PRO". You will be presented with the same Remove/Exclude dialog box that is displayed during the normal Device Remove/Exclude process as described in <u>Remove/Exclude</u>. Follow those procedures for removing a device.

Once you are done using the ZW-PRO device you should remove it from the Z-Wave network.

Remove ZW-PRO from Controller

Selecting this option will display the following dialog box confirming the action.

ZW-PRO as Secondary Controller	
Are your sure you want to Controller?	Remove the ZW-PRO Device as a Secondary
	Tes No

Selecting yes will display the following dialog box.

Removing ZW-PRO from Controller							
Controller is in Remove Mode							
Placing ZW-PRO Device in Learn Mode							
Abort							

Once the process is completed the dialog box will close and the ZW-PRO will have been removed from the Z-Wave network and no longer displayed in the Device List.

If you do not remove the ZW-PRO from the Z-Wave network and attempt to close the Z-Wave Manager program it will prompt you to remove the ZW-PRO device before allowing you to exit.

Reset ZW-PRO 🕲

This operation allows you to reset the ZW-PRO device to a known state. This operation is done automatically if you insert the ZW-PRO while the Z-Wave Manager program is active. But if you have inserted the ZW-PRO before starting the Z-Wave Manager program you will have to manually reset the device before using it.

Remove Failed ZW-PRO 🎾

If there is an error with the ZW-PRO after it has been added to the ZW-9 this option allows you to remove it.



You will be ask to confirm the operation. If it detects that the ZW-PRO is attached to the computer and is functioning properly you will get the follow message.

Force Re	moval
<u> </u>	Device 4 Named: ZW-PRO 1.00 US(4) is Responding and cannot be removed As a Failed Device. Use the REMOVE button from the top toolbar if you need to remove this device.
	ок

Otherwise it will be removed from the Device List.

COMMUNICATIONS - CONTROLLER CHANGE Sub-Menu

💿 Inte	egration De	signer	- Z-Wave Manager							
File	Device	Com	munications Help							
8 🖬 🛛	1	8	Show Controllers on Local Network	ZW-I	pro 🛨 🗕 🏷 🏂					
		-	Network Settings		1				Alarms	Notifications
	ZW-9 00-0	ð	Reset Controller/Start New Installation			HomeID: D6768F27			2/17/20	17 4:37:52 PM: Device 2 SENSOR MULTURE
9, f	Thermostat		Ignore Battery Devices	them	et Connection I217-LM	MAC: 00-15-26-00-00	-83		2	
E		÷	ZW-PRO	0		Role: Primary				
٣	Power Swit	\$	Controller Change		Add ZW-9 to existing Z-Wave	Network	4	To Beco	ne a Seco	ondary Controller (Learn Mode)
	Scene Swit		Restore ZW-9		Add Another Controller to ZV	V-9 Controller 🔹 🕨	₩	And Bec	ome the	Primary Controller (Learn Mode)
E	l	-	Scene#1	-			_			
Integration	egration D	esign	er - Z-Wave Manager							
File	Device	Co	mmunications Help		_					
E 🖬	1	品	Show Controllers on Local Network		zw-pro 🛨 🗕 🕉 🏂					
		-	Network Settings							Alarms/Notifications
	ZW-9 00-0	9	Reset Controller/Start New Installation			HomeID: D	6768F	-27		2/17/2017 4:37:52 PM: Device 2 SEN
$r_{f_{\rm f}} \stackrel{\rm fl}{=}$	Thermosta	t	Ignore Battery Devices		themet Connection I217-LM	MAC: 00-1	188 5-26-0	0-00-83		2/17/2017 4:39:32 PM: Device 2 SEN 2/17/2017 4:38:22 PM: Device 2 SEN
		÷	ZW-PRO	×	1)	Role: Prima	ary			2/17/2017 4:38:25 PM: Device 3 MET 2/17/2017 4:38:25 PM: Device 3 MET
	Power Sw	t	Controller Change	►	Add ZW-9 to existing	Z-Wave Network		•		2/17/2017 4:38:26 PM: Device 3 MET 2/17/2017 4:38:27 PM: Device 3 MET
	Scene Sw	it	Restore ZW-9		Add Another Control	er to ZW-9 Controll	ler	۲ ⇒	As a Se	econdary Controller
Ū,	Power Sw	itch Bi	nary(5) Scene#1					\$	And B	ecome the Primary Controller

There are three (3) basic parts of the Controller Change operations. Replication, Controller Shift, and Learn Mode.

"**Replication**" refers to the protocol replication between Controllers that is used to exchange protocol data between different Controllers of the same network. The Z-Wave controllers receive and transmit protocol replication data during the Learn Mode and Controller Shift operations.

"Controller Shift" refers to the process of adding a second Z-Wave Controller to an existing Z-Wave network to become a Secondary Controller or to become the Primary Controller.

"Learn Mode" refers to the process of placing a Controller device into a mode where it can be added to an existing Z-Wave network to take on the role of a Secondary Controller or take on the role as the Primary Controller.

Controller Shift and Learn Mode are used when you want to add a new controller device (with no Z-Wave network devices configured) to an existing Z-Wave network that already has a Primary Controller (with Z-Wave network devices already configured).

Add ZW-9 to existing Z-Wave Network

To Become a Secondary Controller (Learn Mode) 🗲

This option allows the ZW-9 device to be placed into Learn Mode so that it can be added to an existing thirdparty Z-Wave Controller and take on the role as a Secondary Controller. The existing Z-Wave Controller configuration will determine if the ZW-9 will be a Secondary Inclusion Controller (Can Add/Remove devices from the Z-Wave network) or a Secondary Controller (Cannot Add/Remove devices from the Z-Wave network). (See the documentation for the third-party Z-Wave Controller device for details about making this selection).

This option normally requires the existing Primary Controller device to be setup to include a Secondary Controller.

First activate the Include process on the third-party Primary Controller device. Then select the F on the Controller toolbar to activate the Learn Mode on the ZW-9.

And Become the Primary Controller (Learn Mode) 🎋

This option allows the ZW-9 to be placed into Learn Mode so that it can be added to an existing Z-Wave Controller and take on the role as the Primary Controller in the Z-Wave network. (See the documentation on the other Z-Wave Controller device for details about making this selection). This is normally referred to as a Controller Shift operation.

First activate the Include process on the other Primary Controller to add another controller as the Primary Controller. Then select the ⁵/₄ on the Controller toolbar to activate the Learn Mode on the ZW-9.

Add another Controller to ZW-9 Controller

As a Secondary Controller ≒

This option allows a third-party Z-Wave controller to be added to as a secondary controller to an existing Z-Wave network controlled by the ZW-9 Primary Controller. This process involves having the third-party Z-Wave controller placed into Learn Mode.

(See the documentation on the third-party Z-Wave Controller device for details about making this selection).

And Become the Primary Controller 🕏

This option allows a third-party Z-Wave controller to be added to an existing Z-Wave network controlled by the ZW-9 and take on the role as the Primary Controller while the ZW-9 becomes the Secondary Controller. (See the documentation on the third-party Z-Wave Controller device for details about making this selection).

Chapter 4 ZW-9 Controller Properties

Controller Operations

The ZW-9 is an Interface Module which acts as a Gateway to/from the Z-Wave network.

The ZW-9 interface module is used with RTI XP control systems to enable full control and automation abilities with Z-Wave enabled products. Enables lights, door locks, shades, thermostats, smoke alarms, etc. to be integrated and controlled with feedback through any RTI XP series processor. The ZW-9 contains a built in Z-Wave antenna and communicates with RTI XP processor via Ethernet. Specialized in-house designed (by RTI) system software enables specific configuration of any third-party Z-Wave device ready for control through RTI system. Unit is powered via PoE or direct power supply.

Therefore, the ZW-9 will pass information from the Z-Wave network on to the RTI XP control system. The ZW-9 will not directly respond to the Basic Command or other Unsolicited Commands such as Sensor readings, alarm notifications, etc. But will instead pass it on to the RTI XP control system where it will be processed. The actual process taken depends solely on the User's Configuration of the RTI control system. It could ignore the information or take a specific action based on what type of information is being conveyed. If the information requires notification to another Z-Wave device on the Z-Wave network, then the RTI XP control system will pass the information to the Z-Wave network through the ZW-9 device.

Lifeline Association Group

The ZW-9 only supports 1 Association Group which is the Lifeline group. This enables the RTI control system to receive the critical notifications from Z-Wave devices in the Z-Wave network. The Z-Wave Plus devices are automatically associated with the ZW-9 when the ZW-9 adds the device to the network.

This Association Group is identified by the ZW-9 through the COMMAND_CLASS_ASSOCIATION_GROUP_INFO as Association Group 1, with the Group Name of "Lifeline".

Device Icon/Name Properties

	ZW-9 00-00-83(1) Network Adapter: Intel(R) Ethernet Connection I217-LM	HomeID: CEB42BE6 IP: 10.0.1.16 MAC: 00-15-26-00-00-83
Device: 1	Name ZW-9 00-00-83(1)	Role: Primary

For the ZW-9 the Device Icon/Name Properties include:

- An Icon that provides an identity of the ZW-9.
- A name for the ZW-9:

Give the ZW-9 a descriptive name that helps to identify the Z-Wave network. The name can contain up to 32 characters. This name is not stored in the device. It is used for identifying the ZW-9 in the Z-Wave Manager program and the RTI Integration Designer software.

The default name is given the last 3 digit sets of the ZW-9 MAC Address (In this case 00-00-83) and the Device ID assigned to the ZW-9 (In this case (1)).

- The network interface being used to make the connection to the ZW-9.
- The current HomeID of assigned to the ZW-9.
- The IP address of the ZW-9.
- The network MAC address assigned to the ZW-9.
- The current Role that the ZW-9 has in the Z-Wave network.

This can be one of Primary (Primary Controller) or Secondary (Secondary Controller).

RF Power Properties

RF Power
Get RF Power Level: Normal, Timeout: 0
2 -2dBm 5 - Timeout (sec) Set RF Power
PowerLevel Test
3: Scene Switch Multilevel (: O Power level 10 Number of Test Frames
Start Power Level Test
Get Power Level Test Results
Success Test Device: 3 Ack Count: 10

The Power Level Test is used to perform an actual power level test between the ZW-9 device and one of the devices in the Z-Wave network. In the dropdown list select the device to test with. Only the devices that support the COMMAND_CLASS_POWERLEVEL command class (found in the device properties dialog) will be available. Select the desired power level and select the number of test frames to be sent.

The button "Get RF Power" will retrieve the current Power level setting in the ZW-9 and how long it will be before it times out and returns to the normal power level setting.

Select a Power level of 0 for normal or -1 to -9 dBm.

Select the timeout value of up to 255 seconds.

Then select the "Set RF Power" button to apply the settings.

After applying the settings you can click the "Get RF Power" button to retrieve the settings to see what power level the device is currently at and the remaining time in seconds before the device returns to normal power level. If you select a low power level (i.e. -9 dBm) you may not get a result if the ZW-9 cannot communicate with the selected device at the power level selected.

Start the test by clicking the "Start Power Level Test" button. Select the "Get Power Level Test Results" button to see the test results. If the test is not completed yet you will see the results as: "Test In Progress! Test Device: 3 Ack Count: 56"

When the test is completed you will see the results as:

"Success Test Device: 3 Ack Count: 10" or "Success Test Device: 3 Ack Count: 9"

Or

"Failed! Test Device 3 Ack Count: 0"

Scene Configuration

Scenes				
Select Scene:	Scene 1: Main Scene			
Scene#1	Main Scene			
Select Device(s) to Add to Scene:			
Device 11 Device 12 Device 13 Device 14	: Scene Switch Binary(11) : Scene Switch Multilevel(12) : Scene Switch Multilevel(13) : Scene Switch Binary(14)		Add	
Devices In This	s Scene:	Remove	Selected Device Remove All	
Device #	Name Stat	e Level	Dimming Duration	
11	Scene Switch Binary(11) ON	100%	Factory Default	
12	Scene Switch Multilevel(12) ON	45%	Factory Default	
13 14	Scene Switch Multilevel(13) ON Scene Switch Binary(14) OFF	60% 0%	Factory Default Factory Default	
0% 100% 0N 45% Dimming Duration: 255				
Update Scenes for all Scene Devices Simulate Scene Activate Deactivate				
Scenes need t	Scenes need to be Updated !			

This is where you define the 255 possible Scenes that can exist in the Z-Wave network. The top dropdown list is where you select the Scene you what to create or modify. You can select any of the possible 255 Scenes to create or modify. Once you select a Scene you can create a Scene name with a possible 20 character description. In this example Scene #1 is called Main Scene.

In the "Select Device(s) to Add to the Scene" list you can select the possible devices that have been added to the Z-Wave network that are capable of being included in a Scene. Only devices that support the Z-Wave COMMAND_CLASS_SCENE_ACTUATOR_CONF command class will be listed.

You select a device by checking it in the list and then clicking the "Add" button. Multiple devices can be added at the same time. Once a device is added to the Scene it will be listed in "Devices in This Scene".

You can remove all the devices from the Scene by selecting the "Remove All" button or you can remove an individual device from the Scene by highlighting it and selecting the "Remove Selected Device" button.

Once you add a device and select it in the "Devices in This Scene" list you can then edit the behavior or state this device takes for the selected Scene. If it is a Binary device it can be selected as either ON or OFF for the Scene and if it is a Multilevel device you can choose whether it is ON or OFF and what brightness level it takes in the Scene and how long (Dimming Duration) it takes to reach that desired brightness level when the Scene is activated.

After all devices have been configured for the Scene, use the "Update Scene for all Scene Devices" button to program the devices for the selected Scene. Once the Update has completed it will then be possible to simulate the Scene to see the results. The "Activate" button will activate the selected Scene and the "Deactivate" button will turn off the selected Scene.

After setting up a Scene, save the project. The Scene information is not stored in the ZW-9 Z-Wave Controller device, but each device stores the details they need for each individual Scene they will participate in. When Scenes have been modified but not yet updated, the text "Scenes need to be updated!" will be displayed at the bottom of the Scene Configuration screen.

There will also be an icon S on the ZW-9 Device Icon/Name Properties screen.



The ZW-9 Controller Context Menu can also be used to perform the Scene Updates.



Set Global Units

Set Global Units	
Temperature Scale: 💿 F 🔘 C	

Global Units setting is used to tell Integration Designer what temperature scale is being used by the Z-Wave devices in the system.

• "Select Temperature Scale" selects the temperature scale (F – Fahrenheit, or C- Celsius).

Alarm/Notifications

Alarms/Notifications	Clear List
7/15/2016 8:02:18 AM: Device 20 BASIC 7/15/2016 8:04:39 AM: Device 12 SENSO 7/15/2016 8:05:03 AM: Device 17 NIF-Bu 7/15/2016 8:05:04 AM: Device 17 NIF-Bu 7/15/2016 8:06:22 AM: Device 20 BASIC 7/15/2016 8:08:11 AM: Device 20 SENSO 7/15/2016 8:09:06 AM: Device 17 SENSO 7/15/2016 8:09:06 AM: Device 17 SENSO 7/15/2016 8:09:06 AM: Device 17 SENSO	Set ON 255 DR_ALARM Type:0 State:255 itton Press Set ON 255 DR_ALARM Type:0 State:255 DR_MULTILEVEL 26.35 °C Air Temperature DR_MULTILEVEL 49.22 % Humidity DR_MULTILEVEL 53.65 % Luminance

Unsolicited messages are displayed under the Alarm/Notification on the Right Panel when the ZW-9 Controller device is selected in the Left Panel.

When a Z-Wave device sends unsolicited messages, which have been configured to be sent directly to the ZW-9 Controller or to the Broadcast address these messages will be displayed with a Time Stamp, Device ID, and the type of messages.

In the real runtime environment these messages are passed from the ZW-9 Controller to the XP processor for processing, as the user has configured them to be processed by the XP Controller Processor.

During configuration they are displayed in Z-Wave Manager for diagnostic purposes.

SWITCH ALL Properties

Switch All					
	SWITCH ALL On	SWITCH ALL Off			
	Get SWITCH ALL settings for all Supported Devices				
Device #	Name	Mode			
10	Power Switch Binary(10)	Included in All On and All Off			
11	Scene Switch Binary(11)	Included in All On and All Off			
12	Scene Switch Multilevel(12)	Included in All On and All Off			
13	Scene Switch Multilevel(13)	Included in All On and All Off			
14	Scene Switch Binary(14)	Included in All On and All Off			
Device #10: Power Switch Binary(10)					
Excluded from All ON and All OFF Functionality Excluded from All ON but Not All OFF					
Included in All ON and All OFF functionality Excluded from All OFF but Not All ON					
Get SWITCH ALL settings for Selected Device					
Set SWITCH ALL settings for Selected Device					

The Switch All Properties configures the behavior of each device that supports the Command Class COMMAND_CLASS_SWITCH_ALL. The Switch All Command Class is used to switch all devices on or off. Devices may be excluded/included from the all on/all off functionality.

The "SWITCH ALL ON" button will activate the Switch All On functionality so that you can see the results of the Switch All On settings.

The "SWITCH ALL OFF" button will activate the Switch All Off functionality so that you can see the results of the Switch All Off settings.

The first step is to retrieve the Switch All settings from all the devices that support the Switch All command.

- Use the "Get SWITCH ALL settings for all Supported Devices" button to retrieve the settings.
- Select an individual device in the list to edit its behavior with the radio buttons below the list.
- The button "Get SWITCH ALL settings for the Selected Device" will retrieve the settings for the individual device and the button "Set SWITCH ALL settings for the Selected Device" will apply the selected settings for the individual device selected.

Status Indicators

Just like the Scenes Need Updating Indicator being display next to the ZW-9 Controller device, there are other indicators displayed here.

Scenes Need Updating icon S on the ZW-9 Device Icon/Name Properties screen.

	S ZW-9 00-00-83(1) Network Adapter: Intel(R) Ethemet Connection I217-LM	HomeID: CEB42BE6 IP: 10.0.1.16 MAC: 00-15-26-00-00-83
Device: 1	Name ZW-9 00-00-83(1)	Role: Primary



The dark yellow square will appear on the ZW-9 Controller Icon in the upper right corner if the Scenes need to be updated.

When a Z-Wave Device is selected in the Device list the icon is displayed if information from the device that is needed by Integration Designer has not be retrieve.



In the Device List each device will have the small red square in its upper left corner if this condition exist for any device. This way the user can see all the information without selecting the individual devices.

If an information retrieval operation is aborted or if there was a communication error with a device and its Command Class Versions have not been retrieved a small yellow square will appear in the lower left corner of the device icon.



These Visual Indicators will quickly allow the user to determine in all information is collected from all Z-Wave device, that is needed for Integration Designer to complete the system configuration.



Chapter 5 Device Properties

Introduction

A device may support a variety of Command Classes as determined by the manufacturer.

Select a device in the list to view its properties in the Device Details section. Use the scroll bar if this section has many properties. The first device detail properties section will be the Device Icon/Name Properties where you can enter a descriptive name for the device. The name is used for identifying the device in the Z-Wave Manager program and the RTI Integration Designer software. The name can contain up to 32 characters.

Device Icon/Name Properties

If the device is a Battery operated device. The Device Icon and Device Name Properties will contain a button for Refreshing the Information about the Battery operated device as shown below.

Generic Controller(15)	Refresh Battery Device Information
Device: 15 Name Generic Controller(15)	

The setting of the "Ignore Battery Device" option will have an effect on how this button functions. If the device is a Battery operated device that supports the COMMAND_CLASS_WAKE_UP.

The Device Icon/Name Properties will contain a button to send the Wake Up No More command to the device.



Usually when a device is added the Command Class Versions are automatically retrieved, but if there was a communication error or if the device was a battery device and the Ignore Battery option was selected this information may not have been collected. In this case there would be a marker indicating this condition for the selected device.

	Aller I	Refresh Battery Device
l	SENSOR Routing Alarm Sensor(12)	Information
	1 or more Command Class Versions Not retrieved from Device	
	Device: 12 Name Routing Alarm Sensor(12)	Send WakeUp No More

Basic Properties

Basic	
ON OFF	Status: On

A Basic device type or an unknown device type will contain the Basic Properties:

- "ON" button to turn the device on.
- "OFF" button to turn the device off.
- "Status" that will show the current status of the device on or off.

Switch Properties

Switch				
ON OFF	Status: OFF	Toggle	Get Status	

A device that is a Binary Switch will contain the properties:

- "ON" button to turn the device on.
- "OFF" button to turn the device off.
- "Status" that will show the current status of the device on or off.
- "Toggle" button to toggle the state of the device.
- "Get Status" button to retrieve the current state of the device.

Dimmer Switch Properties

Dimmer Switch			
ON	OFF Status: OFF Tog	gle	
Level:	0 Set Level		
Level Chang	e Parametere		
Primary:	Up Down Mainta	ain Start Level: 0 🚔 👽 Ignore Start Level	
Secondary:	Increment O Decrement O Mainta	ain Secondary Level: 0 🚖 Step Size	
Dimming Duration: 255 🚖 Factory Default			
Start Level Change Stop Level Change			

A device that is a Multilevel (Dimmer) Switch will have the properties:

- "ON" button to turn the device on.
- "OFF" button to turn the device off.
- "Status" that will show the current status of the device on or off.
- "Toggle" button to toggle the state of the device. The Toggle button will toggle the device between OFF and ON at full Brightness regardless of the previous brightness level setting.
- "Level" entry to set the desired brightness level for the device.
- "Set Level" button to set the device to the selected brightness level.

If the Dimmer switch supports version 3 or higher the controls for Level Change will be enabled.

- "Primary Up, Down, Maintain" selects the Primary switch direction of the level change
- "Start Level" selects the level to start at, if the device supports the start level.
- "Ignore Start Level" check box allows to ignore the start level and start at its current level.
- "Secondary Increment, Decrement, Maintain" selects the Secondary switch if the device supports a secondary switch.
- "Secondary Level Step Size" selects the step size to use if the device supports the secondary switch.
- "Dimming Duration" selects the time frame for the Level Change to complete.
- "Start Level Change" button will start the level change operation.
- "Stop Level Change" button will stop the level change operation.

Sensor Binary

Sensor Binary	
Get Sensor Reading	Reading: Sensor is IDLE

A device that supports the COMMAND_CLASS_SENSOR_BINARY will have the properties:

• "Get Sensor Reading" button to retrieve the current status of the binary sensor.

Sensor Multi Level

Sensor Multi level	Get Supported Sensor Types			
Sensor	Value			Get Sensor Reading
Air Temperature Luminance	25.6 °C Air Temperature 3,007 lux Luminance		H	Select Scale:
Seismic Intensity	0.0 Mercalli Seismic Intensity 0.0 m/s2 Acceleration X-axis	•	Ŧ	Celsius Celsius Fahrenheit

A device that supports the COMMAND_CLASS_SENSOR_MULTILEVEL will have the properties:

- "Get Supported Sensor Types" button to retrieve the available sensors.
- Once the sensors have been detected they will be display as shown above. Then select a sensor in the list and use the "Get Senor Reading" button to retrieve the current sensor value.
- "Select Scale" drop down list is used to select the available scales a sensor supports.

Lock Properties

Door Lock		
Lock Get Status	UNSECURED	
Unlock	Door Open Bolt Unlocked	Latch Open
	Target Door/Lock Mode UNKNO	WN
Configuration:		
Get Configuration		Set Configuration
Constant Operation	Timed Operation	
0 🚔 Minute(s) 0	Seconds	
Inside Door Handle Modes	Outside Door Handle Modes	
Handle 1	Handle 1	
Handle 2	Handle 2	Checked = Enabled
Handle 3	Handle 3	
Handle 4	Handle 4	

A device that is an Entry Control will contain:

- "Lock" button for placing the device in the locked state.
- "Unlock" button for placing the device in the unlocked state.
- "Get Status" button for retrieving the state of the device, locked or unlocked.

If the Door Lock supports Timed Operation then the Timed Operation Controls can be used. See the device manual for specific operation.

Battery Properties

Battery	
Get Battery Level	Battery Level: 70%

A device that supports COMMAND_CLASS_BATTERY will contain:

- "Get Battery Level" button to retrieve the current battery level in the device.
- "Battery Level Status" label that will show the current battery level in the device.

Data/Time Properties

Date/Time	
Get Date/Time	Date: 3-28-2016, Time: 09:37:53
Set Date/Time	

A device that supports the COMMAND_CLASS_TIME_PARAMETERS will contain:

- "Get Date/Time" button to retrieve the current date and time settings in the device.
- "Set Date/Time" button set the date and time in the device to the currents date and time settings from the computer.
- If the Device only supports the Time Command Class it will only contain:
- "Get Date/Time" button.

Date/Time	
Get Date/Time	Date: 3-28-2016, Time: 09:37:53

Users Properties

Users						
User	Code	Status		(Get User Codes	
1	1702	Used	Ξ			
2	1212	Used				
3		Available				
4	12345678	Used		User #1	1702	
5	8888	Used		0001 #1	1702	
6	1212	Used		U	odate User Code	
7		Available	Ŧ			

A device that supports the COMMAND_CLASS_USER_CODE will contain:

- "User List" that shows all the possible user settings.
- "Get User Codes" button to retrieve the User list from the device.
- After retrieving the User Code list the User List will display all the users, their codes and the status of "Used" or "Available".
- User Code Entry field Allows a new user code to be entered.
- "Update User Code" button to assign the newly entered code.

Barrier Properties

Barrier			
Close Open Get Status			
Status: STOPPED			
Get Signaling Modes			
Audio: Available: OFF	Tum ON Tum OFF		
Visual: Available: OFF	Tum ON Tum OFF		

A device that supports the COMMAND_CLASS_BARRIER_OPERATOR will contain:

- "Close" button to close the barrier device.
- "Open" button to open the barrier device.
- "Status" label to show the current status of the barrier device, OPENED, OPENING, CLOSED, CLOSING, or STOPPED.
- "Get Signaling Modes" button to retrieve the possible signaling modes, Audio or Visual.
- "Turn ON" and "Turn OFF" buttons for each signaling mode to turn the mode on or off.

Thermostat Properties

Thermostat			
Operating State: Idle			
Get Reading 73.0 °F Air Temperature			
Get Mode Auto			
Thermostat Mode: Heat Set Mode			
Get Fan Auto Low			
Fan Mode: Auto Low Set Fan Mode			
Get Supported Set Points			
Set Point: Heat: 70 °F Set Set Point			
New Value: 70			

A device that supports the COMMAND_CLASS_THERMOSTAT will contain:

- "Operating State" label to show the current state of operation. Usually one of the following: Idle, Heating, Cooling, Fan Only, Pending Heat, Pending Cool, Vent/Economizer, Aux Heating, 2nd Stage Heating, 2nd Stage Cooling, 2nd Stage Aux Heat, or 3rd State Aux Heat.
- "Get Reading" button retrieves the temperature reading from the device.
- "Get Mode" button retrieves the operating mode of the thermostat. Once this is selected it will populate the thermostat mode dropdown list with the possible choices for the thermostat operating mode.
- "Set Thermostat Mode" dropdown list to select the thermostat operating mode. Once an entry is selected in the list, select the "Set mode" button to set the thermostat to this mode.
- "Get Fan" button to retrieve the fan operating mode of the thermostat. Once this is selected it will populate the thermostat fan mode dropdown list with the possible choices for the fan operating mode.
- "Set Fan Mode" dropdown list to select the thermostat fan operating mode. Once an entry is selected on the list, select the "Set Fan Mode" button to set the thermostat fan mode to this mode.
- "Get Supported Set Points" button to retrieve the possible set points in the thermostat. This process will take a while to complete. Once completed it will populate the Set Point dropdown list with the possible set points the thermostat supports.
- "Set Point Dropdown list" is used to select a set point for setting its value using the "New Value" entry field and the "Set Set Point" button.

Keypad Buttons Properties (Scene Controller Device)



A device that supports the COMMAND_CLASS_SCENE_CONTROLLER_CONF will contain:

- "Get keypad Buttons" button to retrieve the number of keypad buttons the device
- supports.
- Once selected it will populate the "Select Keypad Button" dropdown list with the available buttons on the device.
- "Get Current Assignment for Keypad Button" button is used to retrieve the current Scene assigned to the keypad button selected in the "Select Keypad Button" dropdown list. Its assignment is shown below this button.
- "Assign Scene to Keypad Button" button is used to make the Scene assignment to the selected button.
- "Remove Scene Assignment for Keypad Button" button is used to remove the Scene assignment from the selected button.
- "Remove All Keypad Button Assignments" button is used to remove all the Scene assignments from all keypad buttons.

"Select Keypad Button" dropdown list is used to select the keypad Button to assign a Scene to, the Scenes should first be setup using the Scene configuration under the ZW-9. See <u>Scenes</u> for details on setting up the Scenes. Once a keypad button is selected, use the "Select Scene for Keypad Button" dropdown list to select the Scene to be assigned. Then select the "Assign Scene to Keypad Button" button to assign the Scene.

Keypad Buttons	
	Select Keypad Button
Get Keypad Buttons BUTTO	N:1 Max Devics 232
Select Scene for Keypad Button:	Scene 1: Master Scene 🔹
	Scene 1: Master Scene
	Scene 2: Moming Scene
Get Current Assignment for Keypad As	Scene 3: Afternoon =
Button Ke	Scene 4: Evening Scene
	Scene 5: Movie Scene
	Scene 6:
	Scene 7:
Button:1 Assig	Scene 8:
	Scene 9:
	Scene 10:
Remove All Keypa	Scene 11:
	Scene 12:
	Scene 13:
	Scene 14:
	Scene 15:
	Scene 15:
	Scene 17:
	Scene 10:
	Scene 15:
	Scene 20.
	Scene 21.
	Scene 23:
	Scene 24:
	Scene 25
	Scene 26:
	Scene 27:
	Scene 28:
	Scene 29:
	Scene 30:

Associations Properties

Associations		
Get Associations		
Select Association Group: GROUP:1 Max Devices 5		
Select Devices to be Associated with this Group in this Device:		
Device 1: ZW-9(1)		Undete
Device 2: Power Switch Binary(2)		Associations
Device 3: Power Switch Binary(3)		7630010013
Device 4: Scene Switch Binary(4)	=	
Device 5: Power Switch Binary(5)		Remove All
Device 6: Scene Switch Multilevel(6)		Associations For
Device 7: Scene Switch Multilevel(7)		this Group
Device 8: Scene Switch Binary(8)	-	

A device that supports the COMMAND_CLASS_ASSOCIATION will contain:

- "Get Associations" button is used to retrieve the Association Groups the device supports. Once selected it will populate the "Select Association Group" dropdown list and the maximum number of devices that can be associated in the Group.
- Use the "Select Association Group" dropdown list to select an Association Group to work with.
- "Select Devices to be associated with this Group in this Device:" list is used to select the devices that are to be associated with this grouping in this device. After the devices are selected "Checked" use the "Update Associations" button to make the associations.
- "Remove All Associations for this Group" button is used to remove all the associations for the selected Group.

Update Scenes for a Device Properties

Update Scenes for this Device		
Update Scenes		

If a device supports Scenes, then the above box will be displayed allowing the Scenes that have been setup to be sent to the scene device.

Executing this operation will not clear the Scene indicator S. It only updates the scenes for this currently selected device. It is important to update all Scene Devices when the scenes have been modified. This option here can be used when you are sure that only this device needs updating when just this currently selected device has its scene conditions modified.

Multi-Channel Properties

Multi Channel Get Multi Channel Info Number of End Points: 3 Number of Aggregrated End Points: 0						
EndPoint#	Generic	Specific	Command Classes	Members*		
1	SWITCH_BINARY	POWER_SWITCH_BINARY	View Command Classes			
2	SWITCH_BINARY	POWER_SWITCH_BINARY	View Command Classes			
3	SWITCH_BINARY	POWER_SWITCH_BINARY	View Command Classes			
Aggregated End Points Only Assign Name to Endpoint 1 Endpoint 1						

A device that supports the COMMAND_CLASS_MULTI_CHANNEL will contain:

- "Get Multi Channel Info" button to retrieve the Multi-Channel setup in the device. A Multi-Channel device may implement from 1 to 127 end points. Once this button is selected it will populate the End Points List.
- The List will show the End point number, its Generic device class, its Specific device Class, and possible Command Classes for each end point
- The "Command Classes" column in the List will allow you to view the Command Classes supported by the end point.

Double Clicking an entry in the "Command Classes" dropdown list will select this Command Class for configuration. Once an entry is double clicked a control object based on the Command Class will be displayed directly below this Multi Channel control box. See the following sections for more details.

- If a device supports Aggregated End Points, they will be listed after the regular individual end points and the End points that are members of this Aggregated End point will be listed in the Member* Column.
- Each Endpoint can be assigned a Name that will be useful in Integration Designer when configuring a system.



Switch - Multi Channel Properties

A device that is a Binary Switch that supports COMMAND_CLASS_MULTI_CHANNEL will contain the general Binary Switch controls in the Center panel:

Switch			
ON OFF Status: OFF	Toggle	Get Status	

With the Right Panel containing the controls for the Multi Channel Information:

Multi Channel Get Multi Channel Info Number of End Points: 3 Number of Aggregrated End Points: 0						
EndPoint#	Generic	Specific	Command Classes	Members*		
1	SWITCH_BINARY	POWER_SWITCH_BINARY	View Command Classes			
2	SWITCH_BINARY	POWER_SWITCH_BINARY	SWITCH_BINARY			
3	SWITCH_BINARY	POWER_SWITCH_BINARY				
			-			
* Aggregated End Points Only						
Assign Name to Endpoint 2 Endpoint 2						

The Binary Switch Controls in the Center Panel will operate the Default Switch in the Multi Channel device. The Default switch is manufacturer specific, the default switch in a Multi Channel device could be the first end point or it may operate all end points.

A Multi Channel Device may have from 1 to 127 end points. Use the "Get Multi Channel Info" button to retrieve the number of End Points the device supports.

Under the Command Classes column click on "View Command Classes" to see the available Command Classes an end point may support.

Double Click a Command Class in the dropdown list to control the command class for the end point. Once an end point Command Class is selected (Double Clicked) the control object for the end point will be displayed directly below the "Multi Channel" end point selection control.

Switch - End Point: 2				
ON OFF Status: On	Toggle Get Status			

It will be labeled with the selected End Point.



Dimmer Switch – Multi Channel Properties

A device that is a Multilevel (Dimmer) Switch that supports COMMAND_CLASS_MULTI_CHANNEL will contain the general Multilevel (Dimmer) Switch controls in the Center Panel:

Dimmer Swi	itch					
ON	OFF Status: OFF	Toggle				
Level:	0 🚔 Se	et Level				
	- ·					
Level Change	e Parameters					
Primary:	Up O Dov	wn 🔘 Maintain Start	Level: 0 🚔 🔽 Ignore	Start Level		
Secondary:	Increment O Dec	crement 🔘 Maintain 🛛 Seco	ndary Level: 0 🚔 Ste	ep Size		
Dimming Du	uration: 255 🚔 Fact	tory Default				
	Start Level Ch	ange Stop	Level Change			
With the Rig	With the Right Panel containing the controls for the Multi Channel Information:					
Multi Chanr	nel					
Get Multi Cł	nannel Info					
Number of End Points: 5 Number of Aggregrated End Points: 0						
EndPoint#	Generic	Specific	Command Classes	Members*		
1	SWITCH_MULTILE	POWER_SWITCH_MULTI	View Command Classes			
2	SWITCH MULTILE	POWER SWITCH MULTI	View Command Classes			
3	SWITCH_MULTILE	POWER_SWITCH_MULTI	SWITCH_MULTILEVEL			
4	SWITCH_MULTILE	POWER_SWITCH_MULTI				
5	SWITCH MULTILE	POWER SWITCH MULTI				

The Binary Switch Controls in the Center Panel will operate the Default Switch in the Multi Channel device. The Default switch is manufacturer specific, the default switch in a Multi Channel device could be the first end point or it may operate all end points.

* Aggregated End Points Only

A Multi Channel Device may have from 1 to 127 end points. Use the "Get Multi Channel Info" button to retrieve the number of End Points the device supports.

Under the Command Classes column click on "View Command Classes" to see the available Command Classes an end point may support.

Assign Name to Endpoint 3

SWITCH_MULTILE ... POWER_SWITCH_MULTI ...

Endpoint 3

Double Click a Command Class in the dropdown list to control the command class for the end point.

Once an end point Command Class is selected (Double Clicked) the control object for the end point will be displayed directly below the "Multi Channel" end point selection control.

Dimmer Sw	ritch - End Poi	nt: 3			
ON	OFF State	us: ON		Toggle	•
Level:	0 🌩	Set Level]	
Level Cheve	Demoster				
Level Chang	e Parameters	~ -			Gest Levels 🕕 📥 🔲 Japane Start Level
Primary:	O Up	Oown	0	Maintain	Start Level: 0 🔄 🔄 Ignore Start Level
Secondary:	Increment	O Decrement	۲	Maintain	Secondary Level: 0 🚔 Step Size
Dimming D	uration: 5	5 Seconds			
	Start	Level Change			Stop Level Change

If the Multi-Channel Dimmer Switch supports Version 3 or higher the controls for Level Change will be available.

Multi Channel Properties for Other Devices

A device may support the Multi Channel Command Class for multiple end points which are not Switches or Dimmer Switches. For instance a device may support Association Command Class for an end point, allowing the specific end point to be associated with other end points or even associated with other root devices. A Thermostat device could support Multi Channel for Sensors where End Point #1 would provide a temperature reading and End Point #2 would provide a humidity reading.

When a Multi Channel device shows that an end point supports other command classes, selecting the Command Class in the "View Command Classes" dropdown list will result in a control object being displayed below the Multi Channel control object.

Some examples are:

EXAMPLE 1 – Multi Channel Binary Switch

This device supports the Meter Command Class, Switch Binary Command Class and Basic Command Class for each of its 4 endpoints.

Multi Chann Get Multi Cl Number of 1	n el nannel Info End Points: 4	Number of Aggregrated End	d Points: 0		
EndPoint#	Generic	Specific	Command Classes	Members*	
1 2 3 4	SWITCH_BINARY SWITCH_BINARY SWITCH_BINARY SWITCH_BINARY	POWER_SWITCH_BINARY POWER_SWITCH_BINARY POWER_SWITCH_BINARY POWER_SWITCH_BINARY	METER SWITCH_BINARY BASIC View Command Classes		
* Aggregated End Points Only Assign Name to Endpoint 1 Endpoint 1					

Selecting METER in the "View Command Classes" dropdown list for end point #1 will display:

Meter - End Point: 1					
Get Meter Select Scale: kWh Res	et Meter				
Meter Type Electric Measurement is Import/consumed					
Reading: 0.001 kWh Delta Time: 173 seconds					
Previous Reading: 0.001 kWh	200103				

Selecting Switch Binary in the "View Command Classes" dropdown list for end point #1 will display:

Switch - End Point: 1				
ON OFF Status: OFF	Toggle Get Status			

Selecting Basic in the "View Command Classes" dropdown list for end point #1 will display:

Basic - End Point: 1	
ON OFF Status: On	



EXAMPLE 2 – Thermostat controller with 2 end points.

Multi Channel Get Multi Channel Info Number of End Points: 2 Number of Aggregrated End Points: 0						
EndPoint#	Generic	Specific	Command Classes	Members*		
1	THERMOSTAT	THERMOSTAT_GENERA	SENSOR MULTILEVEL			
2	THERMOSTAT	THERMOSTAT_GENERA	ASSOCIATION			
* Aggregated End Points Only						
Assign Name to Endpoint 1 Endpoint 1						

This device supports the Sensor Multilevel Command Class and the Association Command Class for each end point.

End Point #1 provides the Temperature Sensor.

Sensor MultiLevel - End Point: 1	Get Supported Sensor Types	
Sensor	Value	
Air Temperature	70.0 °F Air Temperature	Get Sensor Reading

End Point #2 provides the Humidity Sensor.

Sensor MultiLevel - End Point: 2	Get Supported Sensor Types	
Sensor	Value	
Relative Humidity	20 % Humidity	Get Sensor Reading

The Association for each end point can be set by selecting ASSOCIATION from the "View Command Classes" dropdown list.

Associations - End Point: 1	
Get Associations	
Select Association Group: GROUP:1 Max Devices 2	
Select Devices to be Associated with this Group in this Device:	
Device 1: ZW-9 00-00-83(1) Device 2: Scene Switch Multilevel(2) Device 3: Scene Switch Multilevel(3) Device 4: Scene Switch Binary(4)	Update Associations
Device 5: Scene Switch Binary(5) Device 7: Switch Binary(7) Device 8: Siren(8) Device 11: Power Switch Binary(11)	Remove All Associations For this Group

Multi-Channel Associations Properties

Get Multi Channel Associations Select Multi Channel Association Group: GROUP:1 Max Devices 4 Select Devices to be Associated with this Group in this Device: Device 9: Scene Switch Binary(9) Device 10: Power Switch MultiLevel(10) EndPoint 1: Device 10: Power Switch MultiLevel(10) EndPoint 2: Device 10: Power Switch MultiLevel(10) EndPoint 3: Device 10: Power Switch MultiLevel(10) EndPoint 4: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10)	Multi Channel Associations						
Select Multi Channel Association Group: GROUP:1 - Max Devices 4 Select Devices to be Associated with this Group in this Device: Device 9: Scene Switch Binary(9) Device 10: Power Switch MultiLevel(10) EndPoint 1: Device 10: Power Switch MultiLevel(10) EndPoint 2: Device 10: Power Switch MultiLevel(10) EndPoint 3: Device 10: Power Switch MultiLevel(10) EndPoint 4: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10)	Get Multi Channel Associations						
Select Devices to be Associated with this Group in this Device: Device 9: Scene Switch Binary(9) Device 10: Power Switch MultiLevel(10) EndPoint 1: Device 10: Power Switch MultiLevel(10) EndPoint 2: Device 10: Power Switch MultiLevel(10) EndPoint 3: Device 10: Power Switch MultiLevel(10) EndPoint 4: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10)	Select Multi Channel Association Group:	GROUP:1 Max Devices 4		•			
 Device 9: Scene Switch Binary(9) Device 10: Power Switch MultiLevel(10) EndPoint 1: Device 10: Power Switch MultiLevel(10) EndPoint 2: Device 10: Power Switch MultiLevel(10) EndPoint 3: Device 10: Power Switch MultiLevel(10) EndPoint 4: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10) 	Select Devices to be Associated with this Group in this Device:						
 Device 10: Power Switch MultiLevel(10) EndPoint 1: Device 10: Power Switch MultiLevel(10) EndPoint 2: Device 10: Power Switch MultiLevel(10) EndPoint 3: Device 10: Power Switch MultiLevel(10) EndPoint 4: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10) 	Device 9: Scene Switch Binary(9)			Update Multi			
EndPoint 1: Device 10: Power Switch MultiLevel(10) Image: EndPoint 2: Device 10: Power Switch MultiLevel(10) Image: EndPoint 3: Device 10: Power Switch MultiLevel(10) Image: EndPoint 4: Device 10: Power Switch MultiLevel(10) Image: EndPoint 5: Device 10: Power Switch MultiLevel(10) Image: EndPoint 5: Device 10: Power Switch MultiLevel(10)	Device 10: Power Switch MultiLevel(10)			Channel			
EndPoint 2: Device 10: Power Switch MultiLevel(10) EndPoint 3: Device 10: Power Switch MultiLevel(10) EndPoint 4: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10)	EndPoint 1: Device 10: Power Switch MultiLevel(10)			Associations			
EndPoint 3: Device 10: Power Switch MultiLevel(10) EndPoint 4: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10)	EndPoint 2: Device 10: Power Switch MultiLevel(10)						
EndPoint 4: Device 10: Power Switch MultiLevel(10) EndPoint 5: Device 10: Power Switch MultiLevel(10)	EndPoint 3: Device 10: Power Switch MultiLevel(10)			Remove All Multi			
EndPoint 5: Device 10: Power Switch MultiLevel(10)	EndPoint 4: Device 10: Power Switch MultiLevel(10)		=	Channel			
	EndPoint 5: Device 10: Power Switch MultiLevel(10)			Associations For this Group			
Device 16: ZW-PRO 1.00 US(16)	Device 16: ZW-PRO 1.00 US(16)		Ŧ	una ciroup			

A device that supports the COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION will contain:

"Get Multi Channel Associations" button is used to retrieve the Multi Channel Association Groups that the device supports. Once selected it will populate the "Select Multi Channel Association Group" dropdown list and the maximum number of devices that can be associated in the Group.

Use the "Select Multi Channel Association Group" dropdown list to select an Association Group to work with.

"Select Devices to be associated with this Group in this Device:" list is used to select the Devices or End points that are to be associated with this grouping in this device. After the devices/End points are selected "Checked" use the "Update Multi Channel Associations" button to make the associations.

"Remove All Multi Channel Associations for this Group" button is used to remove all the associations for the selected Group.
Configuration Parameters Properties

If the device is an RTI Product, the Z-Wave Manager can detect this and display the specific Configuration Parameters that the device supports. The "Select Parameter" dropdown list will be populated with the supported parameters. The "Get All Configuration Parameters" button can be used to collect all of the parameters.

Configuration Parameters	
Select Parameter:	PARM:5 Power up state
Parameter #5 Power up s	tate
Get Parameter Set Parameter	r i i i i i i i i i i i i i i i i i i i
Power up state. 1-OFF, 2-ON, 3-Last state.	*
Get All Configuration Paramet	ers Set All Configuration Parameters to Default

A device that supports the COMMAND_CLASS_CONFIGURATION will contain:

- "Select Parameter" dropdown list allows the selection of an individual parameter for modifications.
- "Get Parameter" button is used to retrieve the current settings for the selected parameter.
- "Parameter Value" entry is used to select a possible value for the parameter.
- "Set Parameter" button is used to set the parameter to its selected value.
- Below "Parameter Value" is the notes about the individual parameters that are know if it is an RTI Product.
- If the device is a 3rd party device, the "Get All Configuration Parameters" button will not be available. Each parameter will have to be retrieved individually.
- "Set All Configuration Parameters to Default" will issue the command to set all parameters to default, but this behavior is device dependent.

Configuration P	arameters	
Parameter List:	PARM:1 Delayed OFF	
Parameter #1	PARM:1 Delayed OFF PARM:2 - Panic OFF time PARM:3 - Panic OFF time PARM:4 - Basic set value PARM:5 - Power up state PARM:5 - Panic mode enable PARM:7 - Dimmer ramp time PARM:8 - Kickstart enable/disable PARM:9 - Reset max/min levels to factory default	
Delayed OFF.	PARM:11 Set minimum dimming level	
To use this featu ≬.e. may have to	re the device may have to be activated with a specific button sequence or duration. press and hold the On/Off switch for a few seconds and then release.)	
Get All Confi	guration Parameters Set All Configuration Parameters to Default	

It the device is a 3rd Party device, the Z-Wave Manager will display the Configuration Parameters as Parameter 0 through Parameter 255. The actual number of parameters supported by the device will be unknown and the process of polling the device to collect the information will take some time. The individual Notes for each parameter will simply display "See Product Manual". See the product manual for the device to get the details about the Configuration Parameters. For 3rd Party devices the "Get All Configuration Parameters" button will not be visible (Since the number of parameters is unknown).

Configuration Parameters	
Select Parameter:	PARM:1 Configuration Parameter 1
Parameter #1 Configuration	on Parameter 1
Get Parameter Set Parameter	er
See Product Manual	*
	· · · · · · · · · · · · · · · · · · ·
Get All Configuration Paramet	Set All Configuration Parameters to Default

Wake Up Properties

If a Battery operated device supports the Wake Up Command Class it allows the battery-powered device to notify another device, that it is awake and ready to receive any commands.

Wake-up Wake Up Interval Get 0 Seconds Device to receive Wake Up Notification 1. ZW-9(1)	Send Wake Up No More Set Node 1: ZW-9(1)
Wake-up	
Wake Up Interval	Send Wake Up No More
Get 16777200 🚖 seconds	Set
Device to receive WakeUp Notification	
1. ZW-9 00-00-83(1)	Node 1: ZW-9 00-00-83(1)
Get Capabilities	
Min WakeUp: 300 sec (5 Min 0 sec)	Default WakeUp: 43200 sec (720 Min 0 sec)

A device that supports the COMMAND_CLASS_WAKE_UP will contain:

- "Get" button is used to retrieve the Wake Up Interval setting.
- After using the "Get" button, if the device supports the Wake Up capabilities the "Get Capabilities" button will be displayed.
- "Get Capabilities" button to retrieve the wake up properties.
- "Seconds" entry is used to set the seconds.
- "Device to receive Wake Up Notification" dropdown list is used to select the device to receive the wake up notification when the device wakes up. This would normally be set to the ZW-9 Controller device.
- "Set" button is used to set the wake up interval.
- "Send Wake Up No More" button can be used to let the device know it can return to sleep mode.

Indicator Properties

Indicato Get	value:	5 dec =	05 hex		S	et 5	* *	
7	6	5	4	3	V 2	1	V 0	Set

A device that supports the COMMAND_CLASS_INDICATOR will contain:

- "Get" button to retrieve the current state, level, etc. of the device.
- "Set" button to enable or disable the indicators.
- Use the Numeric Up/down indicator or the 8 checkboxes to set the indicators.

Some devices may show a value of 1 to 99. A value of 0 means off/disabled. A value of 255 (0xFF) means on/enabled.



Notifications Properties

Depending on which version of the Notification Command Class a device supports different options will be displayed.

If the device supports Version 1 the following will be displayed:

Notifications		
Get Supported Notifications	Supports V1	
Version 1		
Alarm Type	Alarm Level	Get Notification
0	0x00	
1	0x00	
2	0x00	
3	0x00	
4	0x00	
5	0x00	
6	0x00	
7	0x00	
8	0x00	
9	0x00	
10	0x00	
11	0x00	
12	0x00	
13	0x00	-

If the device supports Version 2 the following will be displayed:

Get Supported Notifications	itions	Supports V	/2	
Alarm Type		Alarm Leve		Get Notification
Version 2 and Higher				
Version 2 and Higher Alarm Type	Level	Status	Event	Get Notification

See the device's product manual for details about the Notifications the device supports and how they are used.

Meter Properties

Meter	
Get Meter Select Scale: Volts	Reset Meter
Meter Type Electric Measurement is Import/con:	sumed
Reading: 117.93 Volts	Delta Time: () seconds
Previous Reading: 0.00 Volts	

A device that supports the COMMAND_CLASS_METER will contain:

- "Get Meter" button to retrieve the current meter reading in the device.
- "Reading:" label where the current reading is displayed
- "Select Scale" label with a drop down list for selecting a specific scale reading to retrieve.
- "Reset Meter" button to reset the meter reading in the device.
 If the devices does not support the Reset Meter, the button will not be displayed.

Meter	
Get Meter Select Scale:	Volts Reset Meter
	kWh
Meter Type Electric Measurement	u Watts ed
	Volts
Reading: 117.93 Volts	Amps
	Delta Time: U seconds
Previous Reading: 0.00 Volts	
Trevious heading. 0.00 voits	

RF Power Properties

The RF Power Properties is where you can perform some testing of the RF Power level of devices that support the Command Class COMMAND_CLASS_POWERLEVEL.

RF Power	
Get RF Power Power Level:	
1 🚔 -1dBm 15 🚔 Timeout (sec)	Set RF Power
PowerLevel Test	
6: Scene Switch Multilevel(€ ▼ 9 -9dBm	100 Number of Test Frames
Start Power Level Test	
Get Power Level Test Results	
Success Test Device: 6 Ack Count: 100	

The Power Level Test is used to perform an actual power level test between the ZW-9 device and one of the devices in the Z-Wave network. In the dropdown list select the device to test with. Only the devices that support the COMMAND_CLASS_POWERLEVEL command class (found in the device properties dialog) will be available. Select the desired power level and select the number of test frames to be sent.

The button "Get RF Power" will retrieve the current Power level setting in the ZW-9 and how long it will be before it times out and returns to the normal power level setting.

Select a Power level of 0 for normal or -1 to -9 dBm.

Select the timeout value of up to 255 seconds.

Then select the "Set RF Power" button to apply the settings.

After applying the settings you can click the "Get RF Power" button to retrieve the settings to see what power level the device is currently at and the remaining time in seconds before the device returns to normal power level. If you select a low power level (i.e. -9 dBm) you may not get a result if the ZW-9 cannot communicate with the selected device at the power level selected.

Start the test by clicking the "Start Power Level Test" button. Select the "Get Power Level Test Results" button to see the test results. If the test is not completed yet you will see the results as: "Test In Progress! Test Device: 2 Ack Count: 56"

When the test is completed you will see the results as:

"Success Test Device: 2 Ack Count: 100" or "Success Test Device: 2 Ack Count: 97"

Or

"Failed! Test Device 2 Ack Count: 0"

ZW-PRO Properties

ZW-PRO 1.00 US(19)
Device: 19 Name ZW-PRO 1.00 US(19)
ZW-PRO
Add Device using ZW-PRO
Device: 1 ZW-9 00-00-83(1)
Device: 2 Scene Switch Multilevel(2)
Device: 3 Scene Switch Multilevel(3) Device: 4 Scene Switch Binan/(4)
Device: 7 Switch Binary(7)
Device: 8 Siren(8)
Device: 9 Sensor Notification(9)
Device: 11 Power Switch Binary(11)
Device: 14 Sensor Notification(14)
Device: 15 Sensor Notification(15)
Device: 16 Thermostat General v2(16)
Device: 17 Secure Door Lock(17)
Device: 18 Power Switch Binary(18)
···· Device: 19 ZW-PRO 1.00 US(19)

The ZW-PRO properties relate to the ZW-PRO USB adapter device.

For details on using the ZW-PRO refer to <u>COMMUNICATIONS – ZW-PRO Sub-Menu</u>.

Notes

When ZWaveMgr is open and connected to the ZW-9 Controller for configuration, there will be no Control to the Z-Wave Device through the XP Processor Control system. ZWaveMgr puts the XP Processor "Driver" into and Update Mode that will only relay communications throughout ZWaveMgr software in Integration Designer and the ZW-9 Controller.

After closing ZWaveMgr and resending the System File to the XP Processor, the "Driver" will then connect to the ZW-9 and initialize the system.

There are feedback variables added to the Z-Wave Driver that allow for feedback of the current status of the ZW-9 device, that can be added to a control product to display the ZW-9's current status. (These can be used during Trouble shooting).

Driver: [XP3] ZW-9 00-00-84(1) Variables Assign to: Button Text Communications Status Communications Failed Connection State Connection State - Disconnected Connection State - Disconnected Initialization State - Not Initialized Initialization State - Initialized Initialization State - Initialized Initialization State - Initialized Programming State Programming State - Inactive Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Off Switch All Off			
[XP3] ZW-9 00-00-84(1) Image: Communications Status Assign to: Button Text Communications Status Image: Communications Failed Communications Succeeded Image: Connection State Connection State Connection State Connection State Connection State Connection State Connection State Connection State Connection State Connection State Connection State Initialization State Initialized Initialization State Initialized Initialization State Initialized Programming State Inactive Programming State Inactive Programming State Active Driver Commands Image: Control State [Power Switch Binary(2)] On/Off Meter Reset Switch All Off Switch All On [Advanced Parameter Control] Set Parameter Image: Control State unused Image: Control State unused Image: Control State Unused Image: Control State)river:		
Variables Assign to: Button Text Communications Status Communications Failed Connection State Connection State - Disconnected Connection State - Connected Initialization State - Connected Initialization State - Initialized Initialization State - Initializing Programming State - Initializing Programming State - Initialized Initialization State - Connective Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Off Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused unused	[XP3] ZW-9	00-00-84(1)	- 0
Assign to: Button Text Communications Status Communications Failed Communications Succeeded Troubleshooting) Connection State - Disconnected Connection State - Connected Initialization State - Initialized Initialization State - Initialized Initialization State - Initialized Initialization State - Initialized Initialization State - Initialized Initialization State - Active Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused unused unused	Variables		
Communications Status Communications Failed Communications Succeeded (Troubleshooting) Connection State - Disconnected Connection State - Connected Initialization State - Connected Initialization State - Initialized Initialization State - Initializing Programming State - Inactive Programming State - Inactive Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All Off Switch All Off Switch All Off Switch All Off Indvanced Parameter Control] Set Parameter unused unused	Assign to:	Button Text	-
Communications Status Communications Saled Connection State - Disconnected Connection State - Disconnected Connection State - Connected Initialization State - Not Initialized Initialization State - Initialized Initialization State - Initialized Programming State - Inactive Programming State - Active Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All Off Suite Parameter Unused	Commu	nications Status	
Communications Succeeded Troubleshooting) Connection State - Disconnected Connection State - Connected Initialization State - Connected Initialization State - Not Initialized Initialization State - Initialized Initialization State - Initialized Programming State Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All Off Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused unused unused	Commu	nications Failed	
[Troubleshooting] Connection State Initialization State Programming State Programming State Programming State Programming State All Control] Switch All Control] Switch All On [Advanced Parameter Control] Set Parameter unused unused unused	Commu	nications Succeeded	
Connection State - Disconnected Connection State - Connected Initialization State - Connected Initialization State - Initialized Initialization State - Initializing Programming State - Inactive Programming State - Inactive Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All Off Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused	[Troubles	hooting]	
Connection State - Connected Initialization State - Not Initialized Initialization State - Initialized Initialization State - Initializing Programming State - Inactive Programming State - Inactive Programming State - Active Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All Off Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused	Connec	tion State - Disconnected	
Initialization State Initialization State - Not Initialized Initialization State - Initialized Initialization State - Initializing Programming State - Inactive Programming State - Active Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All Off Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused	Connec	tion State - Connected	
Initialization State - Not Initialized Initialization State - Initialized Initialization State - Initializing Programming State - Inactive Programming State - Active The programming State - Active Programming State - Active Programming State - Active The programming State - Act	Initializa	ation State	
Initialization State - Initializing Programming State - Inactive Programming State - Inactive Programming State - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Onff Switch All Onff Switch All On [Advanced Parameter Control] Set Parameter unused unused unused unused	Initializa	ation State - Not Initialized	=
Programming State Programming State - Inactive Programming State - Active T Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused unused	Initializa	ation State - Initializing	_
Programming State - Inactive Programming State - Active	Program	nming State	
Programming state - Active Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused unused	Program	mming State - Inactive	
Driver Commands [Power Switch Binary(2)] On/Off Meter Reset [Switch All Control] Switch All Off Switch All On [Advanced Parameter Control] Set Parameter unused unused unused unused unused	riograf	ning state - Active	*
unused unused unused unused unused unused unused unused	Meter R [Switch Al	Reset Control]	
unused unused unused unused unused	Meter F [Switch Al Switch A Switch A Switch A Switch A Set Par	Reset I Control] All Off All On d Parameter Control] ameter	
unused unused	Meter R [Switch J Switch J Switch J Switch J Set Par	Reset I Control] All Off d Parameter Control] ameter	
unused	Meter R [Switch J Switch J Switch J Switch J Set Par	Reset I Control] All Off All On d Parameter Control] ameter	
	Meter R [Switch A] Switch J Switch J [Advancer Set Par unused unused	Reset I Control] All Off All On d Parameter Control] ameter	
	Meter R [Switch J Switch J Switch J Switch J Switch J Set Par unused unused unused	Reset I Control] All Off All On d Parameter Control] ameter	

If the Driver appears to communicate with the ZW-9 after the initialization is complete the issue may be with the XP Processor reaching the ZW-9 over the LAN.

First disconnect the ZW-9 from its current location and connect it to the same Ethernet switch that the XP Processor is connected to. If this solves the issue than there is a problem with the initializing the uPnP over the network, meaning there are too many switches between the two components or if applicable the ZW-9 needs to be powered by the PSU and not PoE.

Symbols. ICON TYPES

The following Icons are used to identify the Devices.



UNASSIGNED



GENERIC_SENSOR_NOTIFICATION



SPECIFIC_SENSOR_NOTIFICATION_SMOKE_ALARM



SPECIFIC_SENSOR_NOTIFICATION_WATER_ALARM



SPECIFIC_SENSOR_NOTIFICATION_MULTIDEVICE







SPECIFIC SENSOR NOTIFICATION CO2 ALARM

SPECIFIC_SENSOR_NOTIFICATION_ACCESS_CONTROL

SPECIFIC_SENSOR_NOTIFICATION_CO_ALARM

GENERIC_REMOTE_CONTROL_MULTI_PURPOSE

SPECIFIC_SENSOR_NOTIFICATION_EMERGENCY_ALARM

GENERIC REMOTE CONTROL AV



GENERIC_SENSOR_MULTILEVEL



SPECIFIC_SENSOR_MULTILEVEL_TIDE_LEVEL



SPECIFIC_SENSOR_MULTILEVEL_POWER



SPECIFIC_SENSOR_MULTILEVEL_LUMINANCE

SPECIFIC_SENSOR_MULTILEVEL_HUMIDITY



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SPECIFIC SENSOR MULTILEVEL AIR FLOW



SPECIFIC SENSOR MULTILEVEL AIR TEMPERATURE SPECIFIC_SENSOR_MULTILEVEL_WATER_TEMPERATURE SPECIFIC SENSOR MULTILEVEL SOIL TEMPERATURE



GENERIC_SET_TOP_BOX





GENERIC DIMMER WALL SWITCH SPECIFIC_DIMMER_WALL_SWITCH_ONE_BUTTON SPECIFIC DIMMER WALL SWITCH TWO BUTTONS SPECIFIC DIMMER WALL SWITCH THREE BUTTONS SPECIFIC_DIMMER_WALL_SWITCH_FOUR_BUTTONS SPECIFIC DIMMER WALL SWITCH ONE ROTARY GENERIC_ON_OFF_WALL_SWITCH SPECIFIC ON OFF WALL SWITCH ONE BUTTON SPECIFIC ON OFF WALL SWITCH TWO BUTTONS SPECIFIC ON OFF WALL SWITCH THREE BUTTONS SPECIFIC ON OFF WALL SWITCH FOUR BUTTONS SPECIFIC_ON_OFF_WALL_SWITCH_ONE_ROTARY GENERIC ON OFF POWER SWITCH



GENERIC_CENTRAL_CONTROLLER GENERIC_GATEWAY



SPECIFIC SENSOR MULTILEVEL TANK CAPACITY



SPECIFIC SENSOR MULTILEVEL MULTIDEVICE



GENERIC SIREN



GENERIC WINDOW COVERING POSITION ENDPOINT AWARE GENERIC REPEATER GENERIC WINDOW COVERING NO POSITION ENDPOINT GENERIC WINDOW COVERING ENDPOINT AWARE



SPECIFIC_POWER_STRIP_INDIVIDUAL_OUTLET SPECIFIC_LIGHT_DIMMER_SWITCH_PLUGIN SPECIFIC LIGHT DIMMER WALL OUTLET SPECIFIC ON OFF POWER SWITCH PLUGIN SPECIFIC_ON_OFF_POWER_SWITCH_WALL_OUTLET GENERIC_POWER_STRIP



GENERIC DISPLAY SIMPLE

Z-Wave Manager Guide



GENERIC_DOOR_LOCK_KEYPAD



GENERIC_LIGHT_DIMMER_SWITCH SPECIFIC_LIGHT_DIMMER_SWITCH_CEILING_OUTLET SPECIFIC_LIGHT_DIMMER_SWITCH_WALL_LAMP SPECIFIC_LIGHT_DIMMER_SWITCH_LAMP_POST_HIGH SPECIFIC_LIGHT_DIMMER_SWITCH_LAMP_POST_LOW SPECIFIC_ON_OFF_POWER_SWITCH_CEILING_OUTLET



GENERIC_SUB_ENERGY_METER GENERIC_WHOLE_HOME_METER_SIMPLE



GENERIC_VALVE_OPEN_CLOSE



USB CONTROLLER



Icon used by the Z-Wave Manager Program



GENERIC_FAN_SWITCH



GENERIC_THERMOSTAT SPECIFIC_THERMOSTAT_LINE_VOLTAGE SPECIFIC_THERMOSTAT_SETBACK





GENERIC_WALL_CONTROLLER